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TEST OF A SUPERSONIC AXIAL COMPRESSOR STAGE INCORPORATING SPLITTER VANES IN THE ROTOR

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Aerospace Research Laboratories
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Complete experimental results are presented from tests of an axial-compressor stage designed for a tip speed of 1600 ft/sec, a stage total pressure ratio of 3.06, and an inlet hub/tip radius ratio of 0.75. The rotor had been redesigned to incorporate a splitter vane between each pair of principal airfoils. At design speed, the compressor passed 88 percent of design flow, achieved a stage total pressure ratio of 2.77, and achieved isentropic efficiencies of 0.846 for the rotor and 0.674 for the stage. This represented a major improvement over the preceding configuration tested without rotor splitter

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vanes. Future tests are to include various types of boundary-layer control.

PREFACE

This interim report was prepared by Dr. Arthur J. Wennerstrom and 2/Lt William A. Buzzell of the Fluid Mechanics Research Laboratory, Aerospace Research Laboratories (AFSC), Wright-Patterson Air Force Base, Ohio and Mr. Robert D. DeRose of Systems Research Laboratories, Inc., Dayton, Ohio. The work herin reported was accomplished between December 1972 and December 1974.

The report presents results from a portion of the effort of The Fluid Machinery Research Group supervised by Dr. Arthur J. Wennerstrom and conducted under Work Unit 09 of Project 7065, "Aerospace Simulation Techniques Research," under the over-all direction of Mr. Elmer G. Johnson, Director.

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SECTION I

INTRODUCTION

This report presents the results of an experimental evaluation of the single stage, supersonic axial compressor described in Reference 1 and modified according to Reference 2. This compressor was designed for an over-all stage total pressure ratio of 3.06 to 1 at an isentropic efficiency of 81.5 percent. Design tip speed was 1600 ft/sec at standard conditions, and the inlet hub/tip radius ratio was 0.75. There were no inlet guide vanes. The modification described in Reference 2 consisted of redesign of the rotor to incorporate a "splitter vane" between each of the principal rotor airfoils. The splitter vane consisted of an airfoil located circumferentially mid-way in the downstream half of each rotor blade passage and extending full span.

The compressor tested was designed for diffusion levels beyond the range of past experience in both rotor and stator. This choice was deliberate in order to provide a suitable test bed for the evaluation of boundary layer control devices applicable to a compressor and to obtain data at values of Diffusion Factor above 0.5. The performance of the original design, reported in Reference 3, was extemely poor. The results reported herein, obtained after the addition of splitter vanes, represent a major improvement in both rotor and stage performance. The rotor performed relatively close to, although somewhat below, design goals. Stage performance was still significantly short of design objectives. No boundary layer control devices were installed for this test.

The second section of this report describes the test facility flow path, the compressor test vehicle, and the complete instrumentation system. Section III describes the procedures used in taking data and subsequently in reducing the data. The results of the test are presented in Section IV. Section V, the last section, summarizes the conclusions drawn from the data. Appendix A presents detailed aerodynamic results, including computing stations within blade rows, for the data point on each speed line corresponding to peak stage efficiency. *The rest of the Appendices provide sufficient data such that any reader wishing to process any data point not fully presented here, or wishing to process any data point differently, can, with the aid of References 6 and 7 , completely reprocess the data or adapt the raw data to his own data reduction scheme.*

SECTION II

APPARATUS

1. FACILITY FLOW PATH

The test facility used is of the open-loop variety. It is schematically shown in Figure 1. Air enters the facility through a filter designed to remove five micron particles with a 99.5 percent efficiency. The air then passes through a 30-inch duct to a Dall Flow Tube located about six pipe diameters downstream. About two pipe diameters further downstream, the air is turned 90 degrees with the aid of turning vanes and then passes through a perforated plate designed to reduce inlet pressure approximately three psi at 24 lb/sec flow at standard atmospheric conditions. Following this, the air passes through a tube bundle and subsequently enters a 48-inch diameter settling chamber. The settling chamber contains a perforated conical flow spreader and two screens patterned after the model investigation reported in Reference 4. From the settling chamber, air enters the compressor through a direct-coupled bellmouth. Air leaving the compressor is deflected radially outward to a peripheral throttle. The throttle consists of one stationary and one rotating cylindrical ring, each with 16 circumferentially distributed matching holes. Throttling takes place at a diameter of approximately 47 inches. Downstream of the throttle, the flow enters a collector, from which it is passed through a 24-inch duct to a silencer, and back to the atmosphere. A fast-acting poppet type valve, bypassing the throttle valve, is also available to relieve surge conditions. A cutaway drawing of the complete test facility is shown in Figure 2.

2. COMPRESSOR TEST VEHICLE

A cross section of the research compressor is shown in Figure 3. The design employs a cantilevered rotor supported by four 0.5-inch thick bearing support struts with leading edges located about two stator chord lengths downstream of the stator trailing edge plane. The rotor tip diameter at the leading edge is nominally 18 inches. Oil seals are controlled gap carbon seals with an air barrier. No oil leakage into the flow path has ever been experienced. Cold rotor radial tip clearance with the rotor at rest is 0.037 to 0.039 inch. Hot clearance at design speed is predicted to be approximately 0.020 inch or about 0.6 percent of the mean rotor chord. The rotor shaft is mounted on ball bearings. Radial runout does not exceed 0.0005 inch. The bulletnose and inlet hub flow path are supported by six bi-convex struts in the inlet. The flow area contraction ratio between the trailing edge plane of the struts and the leading edge plane of the rotor is 2.72 to 1. Surface finish on all surfaces adjacent to the flow upstream of the bearing support struts is 32 microinches or better. An abradable coating has been employed in the casing adjacent to the rotor tip. However, no rubs have been experienced, even in stall. The rotor is of integral construction, the blades and disc being machined from a single forging

of 6Al-4V titanium. The stator blades are individually inserted but are machined integrally with platforms at hub and tip. The gap between adjacent platforms lies in the range of 0 to 0.002 inch. A photograph of the rotor is shown in Figure 4.

3. COMPRESSOR INSTRUMENTATION

Aerodynamic instrumentation in the compressor consists of measuring points in stator leading edges for total pressure and temperature, rakes downstream of the stators for total pressure and temperature, a large number of static pressure taps distributed on the inner and outer flow path and on the surface of one pair of stator blades, and dynamic wall pressure measurements made over the rotor tip. Measurements of inlet total pressure and temperature, mass flow, relative humidity, and rotor speed are accomplished outside of the compressor and are discussed in paragraph 4 of Section II. The Supersonic Compressor research vehicle has a total of 133 sensors measuring aerodynamic parameters at various points throughout the stage. Refer to Figure 3 and Table 1 for specific locations. Some of the static pressures are sensed at more than one point and are manifolded to become, in each case, a single measurement. Figure 5 shows the vehicle instrumentation bulkhead.

a. Temperature Measurements

(1) Location

A total of thirty-nine Chromel-Alumel thermocouples are used to sense temperature. Four are mounted in the plenum, ten are mounted in the vane leading edges, and twenty-five are located in the five discharge plane rakes. The vane leading edge and the rake mounted thermocouples are of the slot vented probe type (Figures 6, 9a., and 10). A detailed analysis of the features of the slot vented design, along with recovery factor characteristics, may be found in Reference 5. The rakes were designed with the sensors dividing the discharge annulus into equal radial increments while circumferential spacing is on divisions equal to 2.2 times the distance between vane trailing edges. In Figure 3, the discharge plane drawing is in error. The temperature rake shown at 203° 31' should be located at 211° 33'.

The ten stator leading edge thermocouple probes are mounted on four vanes with two vanes having two thermocouples and two vanes having three thermocouples. As with the discharge rakes, these probes are also spaced to divide radially the stator annulus into five equal increments; however, in this case with two sensors per radius.

(2) Calibration

All thermocouples were fabricated from individually insulated, single rolls of Chromel and Alumel wire. Samples were taken periodically along the rolls as the thermocouples were made for vehicle installation. These sample thermocouples were calibrated against a model 162 platinum resistance bulb primary standard manufactured by

Rosemount Engineering Company. A constant temperature oil bath, made by Lauda Division of Brinkman Instruments, Inc. was used as the heat medium. The bath was set at four different temperatures within the range of interest. The results, indicated in Table 2, show a worst case error of plus or minus 0.5°F at the highest temperature.

With thermocouple calibrated as indicated, the entire electronic system employed to record temperature data was examined. The results are shown in Table 3. Taking the worst case error, at the highest temperature, for both the thermocouples and readout system yields a maximum error of plus or minus 0.9°F. The more realistic RSS error goes from 0.23°F at 150 degrees to 0.65°F at 350 degrees. Finally, when recovery factor variation is added, the RSS error at 350°F becomes plus or minus 1.0°F. Figure 7 depicts the equipment used in the calibrations.

b. Pressure Measurements

(1) Location

Thirty-five static (PS) and thirty-five total (PT) pressures are measured in the vehicle flowpath. Twenty-five of the static taps are distributed at various points on the compressor flowpath liners. In particular, ten of these are located over the rotor blade tip, starting at 0.25 inch axially forward of the leading edge and following at 0.25 inch axial intervals extending downstream. A further ten statics are located approximately mid-chord radially on two vanes with seven suction side taps on one vane and three pressure side taps on the other.

The ten vane mounted total pressure probes are of the Kiel stagnation tube design (Figure 8) and are mounted with two sensors on each of two vanes and three on each of two other vanes. All are radially located to divide the annulus into five equal parts, with two measurements per radius. The other twenty-five are impact tubes mounted as five radial rakes of five sensors each, dividing the discharge annulus into equal increments which are circumferentially spaced in a manner similar to that of the temperatue rakes. An impact pressure rake is shown in Figure 9.b.

Located for use in conjunction with the static taps placed over the rotor blade tips are eight Kistler Model Number 603A pressure transducers and a Bentley Model 316 proximity detector. Because of problems observed at high speed with the Kistler dynamic pressure data, no further mention will be made of this sytem.

(2) Calibration

Four Statham strain gage type transducers are used to convert the various pressures into electrical signals for processing through readout and recording. One transducer is located in each of four, forty-eight port Scanivalve sequential pressure switching devices. The

pressures to be sampled are connected to odd numbered ports while moderate vacuum is applied to all even (Roughing) ports to minimize hysteresis effects.

Three calibration pressures are sensed by all four Scanivalves on every scan. These are barometric, 15 PSIG and 30 PSIG. The 15 and 30 PSIG standards are supplied by Ametek Model PK-30 self-regulating, primary deadweight type, pressure standards referred to atmosphere. The computer software used for data reduction corrects these two gauge values against variation in local barometric pressure and creates a new transducer calibration curve for every scan. Two absolute calibration pressures have been added to this system for use in future tests, and the barometric calibration pressure has been eliminated.

c. Readout Electronics

Data are collected and recorded through use of a Hewlett Packard 2012B Data Acquisition System (DAS). This system is comprised of a 2911 guarded crossbar scanner, 2547A coupler, 2402A integrating digital voltmeter, 5050B digital recorder, and a Kennedy 1506 incremental tape recorder.

As previously stated, pressure measurements are routed through four Scanivalve units using Statham transducers for conversion into electronic signals. A "Scanivalve" offers the advantage of using the same transducer to measure many pressures and lends itself to on-line calibration as described above. An interface unit was built to program the Scanivalves, along with other parameters,into the HP DAS in a manner which minimizes scanning time without compromising transducer settling time. Instead of sampling the same port on all valves sequentially before stepping to the next port, the digital interface causes each valve to move through its next roughing port to its next data point immediately after being interrogated. Each transducer then has an opportunity to settle out at its next test pressure while two others are sequentially interrogated. This sequence is repeated until all ports are sampled. Approximately six seconds lapse for the entire procedure.

Thermocouple outputs are routed through a Kaye Instruments' Model K170 electronic ice point reference into the interface unit and then to the HP DAS.

4. TEST FACILITY INSTRUMENTATION

a. Rotor Speed

A Bentley Model 306 transducer senses six grooves machined into the gearbox/rotor driveshaft coupling. The output is fed into a Model 3115 proximitor for signal conditioning. The proximitor signal is a train of pulses having a repetition rate corresponding to rotor RPM/10. This

repetition rate is directly recorded by the HP DAS. A Bently Model 5030 digital tachometer provides a visual indication of rotor speed accurate to ten RPM. The Tachometer also includes an adjustable speed limiting switch as a safety feature.

b. Mass Flow

Inlet pressure is metered through a product series 122 Dall tube venturi manufactured by B.I.F. Industries with a 12.687-inch throat. Metering accuracy has been calibrated to plus or minus one-half percent by the manufacturer. Static pressure taps are located both in the throat and in the inlet cavity.

c. Inlet (Plenum) Total Pressure and Temperature

Compressor inlet total pressure is assumed equal to plenum static pressure just downstream of the last screen. Four static taps are manifolded into one pressure and recorded on two separate Scanivalves. The Maximum error associated with this assumption is 0.06 percent. Temperature is sensed by four bare junction thermocouples located in the same axial plane as the pressure taps, and supported on two crossed cables.

d. Analog Compressor Mapping

An on-line plot of stage pressure ratio vs pseudo mass flow was effected through use of a Mosely Model 2FRA X-Y plotter. Teledyne pressure transducers were used to sense stage inlet P01, stage exit P03 from a mid-radius stagnation tube and hub P1 (measured 0.25 inch upstream of the rotor). Operational amplifiers were used to ratio exit P03 to inlet P01 and also to ratio hub P1 to inlet P01. Stage pressure ratio was used to excite the Y-axis while 1 - (P1/P01) was sent to the X-axis. The approximate compressor map so obtained was used to select a reasonable distribution of throttle settings at which to record detailed data.

e. Relative Humidity

A Foxboro Dewcel Model 2711TG-K222 was mounted in the inlet stack to monitor humidity. This device continuously measures the moisture content of the air by sensing the temperature at which the partial pressure of its water vapor is equal to the water vapor pressure of a saturated salt solution. The humidity information is acquired by the DAS as a thermocouple reading on every test run and subsequently treated in the Phase I data reduction program.

SECTION III

TEST PROCEDURE AND DATA REDUCTION

1. TEST PROCEDURE

Test data were taken in order of increasing speed, with each speed-line being entirely probed before any data at higher speed were acquired. The on-line analog x-y plot capability discussed in paragraph 4.d. of Section II was used to select the test points, since on-line data reduction was not available.

For each speedline, test data were first acquired at a partially-closed exhaust throttle settling, after which the compressor was gradually throttled to include stall. After recovery, data were taken at several points as the throttle was opened from near-stall to wide-open. Stall was indicated by two sources: the dynamic pressurers across the rotor tip, which were displayed on oscilloscopes on the test operator's console, and a microphone in the plenum. Sudden oscillations of the above-mentioned x-y plotter were further indicators that stall had occurred.

Data were acquired at the rate of about one speedline per hour. On dates when elevated speed lines were investigated, a single test point at each of several lower speeds was taken to assure data integrity by comparison to previously acquired data at these lower speeds.

Prior to each test, an atmospheric pressure reading was obtained from a mercury barometer at the test site. The rig was initially brought up to speed and then monitored for about ten minutes, when it was assumed equilibrium had been reached. A five-minute dwell at each throttle setting was observed prior to data acquisition. Two data scans were acquired per test point on each speedline.

A 12-character test identification number was manually assigned to each test point and acquired by the DAS as the first item of information during data acquisition at that point (character 1: last digit of year; characters 2-3: numerical month; characters 4-5: numerical day of month; characters 6-7: test point number on that particular date; characters 8-10: numerical throttle setting; characters 11-12: last two digits of the nominal percent-speed (e.g., 85% = 85; 100% = 00)). Where two scans were taken at a particular test point automatically each scan bears the same test identification number.

Finally, a listing of all raw experimental data which were acquired during testing of this stage is provided in Appendix D, and all computer input data used for Phases I and II of the data reduction are provided in Appendix B.

2. DATA REDUCTION - PHASE I

Phase I reduction of the test data was accomplished by using a slightly modified version of the computer program described in Reference 6. The modifications are subsequently described in Reference 3.

In Reference 6, Equation (11) is in error and should be expressed as follows:

$$W = C1 \cdot \frac{CQ\ Y\ d^2\ F}{\sqrt{1 - \beta^4}} \sqrt{h(\gamma_a + \gamma_v)}$$

No change, however, is required to the actual computer coding of the original program.

3. DATA REDUCTION - PHASE II

Phase II reduction of the test data was accomplished by using the computer program described in Reference 7.

To aid in the calculation procedure of the within blade analysis, a CALCOMP plotting routine labeled DEVPLOT was developed to allow better visualization of the deviation angles at each rotor computing station and hub, mid, and tip streamlines. The DEVPLOT input values used are the final deviation angles determined during a within blade calculation. The values are given as a function of normalized axial distance. A complete listing of this program is given in Appendix C1.

In addition to the DEVPLOT routine, a second CALCOMP plotting routine was utilized to plot the stator mid-span surface static pressure distribution for each within blade analysis. This program is labeled STAPLOT and uses the experimental readings of the seven suction surface static taps and the three pressure surface static taps (located on the mid-span of the instrumented stator blades) as input values. Extrapolated static pressure values for the stator leading and trailing edges are also input to the plotting routine. These values are based on the radial location of the first and last suction surface static taps and the leading and trailing edge calculated values of static pressure determined by the within blade analysis. A complete listing of this program is given in Appendix C2.

SECTION IV

RESULTS

1. OVER-ALL PERFORMANCE

The mass-averaged performance of the rotor and of the complete compressor stage is tabulated in Table 4 and plotted in Figure 12. The performance shown is a major improvement over the original configuration tested (without rotor splitter vanes) and reported in Reference 3. At 100 percent design corrected speed, corrected flow was approximately 12 percent low, rotor efficiency was 5 points low, stage efficiency was 14 points low, rotor total pressure ratio peaked at 3.47 versus a design value of 3.35, and stage total pressure ratio peaked at 2.77 versus 3.06, respectively. The compressor was throttled to stall at each corrected speed shown on the map. The data point nearest stall was taken at a throttle opening approximately 0.5 percent further open than the setting which precipitated stall. This change in throttle area is equivalent to about 0.9 percent of the annulus area at the rotor inlet.

2. BLADE-ELEMENT PERFORMANCE (ACROSS BLADE)

The radial distributions of relative inlet Mach number, incidence angle, loss coefficient, deviation angle, and diffusion factor for both rotor and stator are presented in Figures 13 through 82, using Tables 5-11, for each data point shown on the compressor map. One set of these five radial distributions is presented for each blade row at each corrected speed. In each of these sets, the distributions for all throttle settings are superimposed on each respective plot. As described earlier in Section III, this data was reduced using the full radial equilibrium equation with the equations of momentum, continuity, etc. satisfied at each computing station for each streamline. This data, also used for the compressor map, was reduced with computing stations only at blade-row edges and in free spaces; there were no computing stations internal to blade rows.

3. BLADE-ELEMENT PERFORMANCE (WITHIN BLADE)

The data point nearest maximum stage efficiency for each operating speed was selected for more detailed analysis. The more detailed analysis involved the introduction of four additional computing stations within the rotor. The data reduction was then accomplished in the same manner as before, with blockages and deviation angles internal to the rotor adjusted so that the calculated and measured static pressures along the casing adjacent to the rotor tip were as nearly coincident as possible. The results of these analyses include plots of the radial

distribution of the same five parameters for rotor and stator described in the preceding paragraph (Figures 102 through 191), plots of the experimental (rotor only) and calculated axial distribution of static pressure at hub, mean, and case (Figures 192 through 201), corresponding plots of the distribution of deviation angle within the rotor blade row (Figures 202 through 211), plots of the surface distributions of static pressure for a mid-span section of the stator (Figures 212 through 221), and a complete aerodynamic description at each computing station - streamline intersection (Appendix A).

ROTOR TIP DYNAMIC PRESSURE MEASUREMENTS

The dynamic distribution of static pressure over the rotor tips was observed during operation to assess qualitatively flow stability during the test. In general, the flow appeared much more stable at the higher speeds than was the case with the previous compressor configuration reported in Reference 3. Also, as design speed was approached, the dynamic pressure signal measured 0.25 inch upstream of the rotor because very weak, indicating that the passage shock had probably been swallowed. A few bursts of these data were recorded on wide-band FM magnetic tape. However, no further processing of these data was attempted since at no time during the course of these tests were all elements of the dynamic pressure recording system working satisfactorily simultaneously.

SECTION V

CONCLUSIONS

The major conclusion drawn from the reported tests was that splitter vanes added to the axial compressor rotor accomplished their intended purpose of controlling rotor deviation angles at off-design, high incidence operating conditions with a satisfactory level of total pressure losses. Furthermore, operation of the compressor was now close enough to its design point that it appeared feasible to embark upon the series of boundary-layer-control modifications originally envisioned to assess their potential usefulness in this type of environment.

The dramatic decrease achieved in deviation angle is best seen by referring to Figures 222 and 223. The first of these figures presents deviation angle at the rotor trailing edge mid-radius location versus rotor incidence at mid-radius on the leading edge for the original rotor as presented in Reference 3 and also for the new rotor. Whereas a definite trend was apparent for the original rotor, all data points for the new rotor fall in a cluster, exhibiting no apparent sensitivity to incidence angle. The single data point shown for each corrected speed corresponds to operation at peak stage efficiency for each respective speed. The second of these figures compares the design radial distribution of deviation angle with distributions measured at design speed for the first and second rotor configurations. Whereas deviation angles measured with the first rotor remained well above design values all along the span, deviation angles recorded for the second rotor remained substantially lower than design values over most of the span. Only locally near the tip was deviation observed to rise rapidly above the design level. This might be due to boundary layer separation on the outer casing. It might also be due to rotor boundary layer and wake fluid, rotating at near blade speed, being centrifuged outward and collecting at the outer casing.

In order to assess the loss characteristics of the rotor, it was necessary to divide the measured total losses into diffusion losses and shock losses. Reference 8 presents the results of a cascade test of a blade section corresponding to streamsurface No. 10 in the design calculations of Reference 1, with splitter vanes added. At design-point operating conditions, static pressure along the suction surface of the principal airfoils was seen to be nearly constant at the undisturbed free-stream value up to the shock impingement point indicating that neither precompression nor expansion has occurred upstream of the passage shock wave. Consequently, since the compressor stage passed only about 88 percent of design flow, the suction surface Mach number just upstream of the shock wave was assumed

to be increased above the free stream relative value by an amount equal to a Prandtl-Meyer expansion from the relative free stream Mach number through an angle equal to the difference betweem actual operating incidence and design incidence. Shock loss was then presumed equal to the total pressure loss through a normal shock having an upstream Mach number equal to the average of the relative free stream and section surface Mach numbers on any streamsurface. Interpolating between streamsurfaces, these computations were performed for blade sections at 10, 50 and 90 percent span. Shock loss was subtracted from the total loss measured at the same location, and the result was plotted in the form of Total Pressure Loss Parameter versus Diffusion Factor in Figure 224. Blade solidity was presumed equal to the sum of principal blade chord plus splitter vane chord divided by the mean circumferential spacing between principal blade sections. Shown in this same figure are curves derived from Reference 9 and the extrapolation made for design purposes and presented in Reference 1. The interesting conclusion drawn from this figure is that at Diffusion Factors below 0.6, where there is extensive data, the blade section including splitter vanes performs exactly as would be expected, upon taking the increaed solidity into account. However, at Diffusion Factors substantially above 0.6, the blade section with splitter vanes continues to perform satisfactorily and with losses lower than expected.

Consequently, the application of splitter vanes to axial compressor blade rows has potential for configurations combining relatively low aspect ratio with high aerodynamic loading. They should be suitable for stationary as well as rotating blade rows. They may also be suitable for fully subsonic blade sections as well as supersonic sections for which the concept was demonstrated. Although the rotor performance reported herein was good, the data of Reference 8 indicate that the splitter vane design was not optimum. The simple approach used for this splitter vane design, which consisted of duplicating the camber line of the principal airfoils and locating the splitter vane in mid-channel, resulted in very poor pressure distributions around the splitter vane, including re-expansion to supersonic Mach numbers according to Reference 8. It appears that a splitter vane carefully designed in the cascade plane might produce much lower losses than reported herein.

TABLE I

INSTRUMENTATION LIST

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
057	T/C	6.181	7.800	36°48'	Disch Rake Element
058	T/C				Humidity
059	T/C				(Not In Use)
060	T/C			45°	Plenum
061	T/C			135°	Plenum
062	T/C			225°	Plenum
063	T/C			315°	Plenum
064	T/C	LE	8.371	Vane 22	Leading Edge
065	T/C	LE	8.371	Vane 42	Leading Edge
066	T/C	LE	8.251	Vane 24	Leading Edge
067	T/C	LE	8.251	Vane 44	Leading Edge
068	T/C	LE	8.121	Vane 22	Leading Edge
069	T/C	LE	8.121	Vane 42	Leading Edge
070	T/C	LE	8.001	Vane 24	Leading Edge
071	T/C	LE	8.001	Vane 44	Leading Edge
072	T/C	LE	7.871	Vane 22	Leading Edge
073	T/C	LE	7.871	Vane 42	Leading Edge
074	T/C	6.181	8.440	4°28'	Disch. Rake Element
075	T/C	6.181	8.440	36°48'	Disch. Rake Element
076	T/C	6.181	8.440	69° 7'	Disch. Rake Element
077	T/C	6.181	8.440	211°33'	Disch. Rake Element
078	T/C	6.181	8.440	243°58'	Disch. Rake Element
079	T/C	6.181	8.280	4°28'	Disch. Rake Element
080	T/C	6.181	8.280	36°48'	Disch. Rake Element
081	T/C	6.181	8.280	69° 7'	Disch. Rake Element
082	T/C	6.181	8.280	211°33'	Disch. Rake Element
083	T/C	6.181	8.280	243°58'	Disch. Rake Element
084	T/C	6.181	8.120	4°28'	Disch. Rake Element
085	T/C	6.181	8.120	36°48'	Disch. Rake Element
086	T/C	6.181	8.120	69° 7'	Disch. Rake Element
087	T/C	6.181	8.120	211°33'	Disch. Rake Element
088	T/C	6.181	8.120	243°58'	Disch. Rake Element
089	T/C	6.181	7.960	4°28'	Disch. Rake Element
090	T/C	6.181	7.960	36°43'	Disch. Rake Element
091	T/C	6.181	7.960	69° 7'	Disch. Rake Element
092	T/C	6.181	7.960	211°33'	Disch. Rake Element
093	T/C	6.181	7.960	243°58'	Disch. Rake Element
094	T/C	6.181	7.800	4°28'	Disch. Rake Element
095					
096	T/C	6.181	7.800	69° 7'	Disch. Rake Element
097	T/C	6.181	7.800	211°33'	Disch. Rake Element
098	T/C	6.181	7.800	243°58'	Disch. Rake Element

TABLE I (continued)

ITEM NUMBER	TYPE SENSOR	LOCATION AXIAL	RADIAL	CIRCUMFERENTIAL	REMARKS
101	Atmos				Barometric Pressure
103	PS				Venturi Throat
105	PS				Venturi Cavity
107	PT				Plenum
109	PS	-0.25	ID	315°	Casing (Same as 751)
111	PS	-0.25	OD	315°	Casing
113	PS	0.00	OD	306°	Casing
115	PS	0.25	OD	294°	Casing
117	PS	0.50	OD	180°	Casing
119	PS	0.75	OD	190°	Casing
121	PS	1.00	OD	310°	Casing
123	PS	1.25	OD	170°	Casing
125	PS	1.50	OD	290°	Casing
127	PS	1.75	OD	301°	Casing
129	PS	2.00	OD	160°	Casing
131	PS	3.227	8.163	Vane 16	Suction Side Vane
133	PS	3.393	8.175	Vane 16	Suction Side Vane
135	PS	3.361	8.184	Vane 16	Suction Side Vane
137	PS	3.837	8.190	Vane 16	Suction Side Vane
139	PS	4.115	8.191	Vane 16	Suction Side Vane
141	Ref.				Not Used
143	Ref.				Atmos.
145	Ref.				15 PSIG Reference
147	Ref.				30 PSIG Reference
201	Atmos				Barometric Pressure
203	PS				Same as 103
205	PS				Same as 105
207	PT				Same as 107 and 752
209	PS	4.281	8.192	Vane 16	Suction Side Vane
211	PS	4.559	8.194	Vane 16	Suction Side Vane
213	PS	-2.00	ID	45° & 135°	Two Manifolded Taps
215	PS	-2.00	ID	225° & 315°	Two Manifolded Taps
217	PS	-2.00	OD	45° & 135°	Two Manifolded Taps
219	PS	-2.00	OD	225° & 315°	Two Manifolded Taps
221	PS	2.25	OD	Vanes 18,22,	Four Manif. Taps
				40 & 44	
223	PS	2.25	ID	113.5°,156.5°	Four Manif. Taps
				290.5°&334.5°	
225	PS	6.181	OD	60°	Casing
227	PS	6.181	OD	120°	Casing
229	PS	6.181	OD	252°	Casing
231	PS	6.181	OD	300°	Casing
233	PS	6.181	ID	60°	Casing
235	PS	6.181	ID	120°	Casing
237	PS	6.181	ID	252°	Casing
239	PS	6.181	ID	300°	Casing

TABLE I (continued)

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
241	Ref.				Not Used
243	Ref.				Atmos.
245	Ref.				15 PSIG Reference
247	Ref.				30 PSIG Reference
301					Not Used
303					Not Used
305	PS	3.393	8.175	Vane 17	Pres. Side of Vane
307	PS	3.837	8.189	Vane 17	Pres. Side of Vane
309	PS	4.281	8.191	Vane 17	Pres. Side of Vane
311	PT	LE	8.371	Vane 20	Leading Edge
313	PT	LE	8.371	Vane 40	Leading Edge
315	PT	LE	8.251	Vane 18	Leading Edge
317	PT	LE	8.251	Vane 47	Leading Edge
319	PT	LE	8.121	Vane 20	Leading Edge
321	PT	LE	8.121	Vane 40	Leading Edge
323	PT	LE	8.001	Vane 18	Leading Edge
325	PT	LE	8.001	Vane 47	Leading Edge
327	PT	LE	7.871	Vane 20	Leading Edge
329	PT	LE	7.871	Vane 40	Leading Edge
331	PT	6.181	7.800	20°47'	Disch. Rake Element
333	PT	6.181	7.800	52°37'	Disch. Rake Element
335	PT	6.181	7.800	195°29'	Disch. Rake Element
337	PT	6.181	7.800	227°49'	Disch. Rake Element
339	PT	6.181	7.800	260° 8'	Disch. Rake Element
341	Ref.				Not Used
343	Ref.				Atmos.
345	Ref.				15 PSIG Reference
347	Ref.				30 PSIG Reference
401	PT	6.181	7.960	20°47'	Disch. Rake Element
403	PT	6.181	7.760	52°57'	Disch. Rake Element
405	PT	6.181	7.960	195°29'	Disch. Rake Element
407	PT	6.181	7.960	227°49'	Disch. Rake Element
409	PT	6.181	7.960	260° 8'	Disch. Rake Element
411	PT	6.181	8.120	20°47'	Disch. Rake Element
413	PT	6.181	8.120	52°71'	Disch. Rake Element
415	PT	6.181	8.120	195°29'	Disch. Rake Element
417	PT	6.181	8.120	227°49'	Disch. Rake Element
419	PT	6.181	8.120	260° 8'	Disch. Rake Element
421	PT	6.181	8.280	20°47'	Disch. Rake Element
423	PT	6.181	8.280	52°57'	Disch. Rake Element
425	PT	6.181	8.280	195°29'	Disch. Rake Element
427	PT	6.181	8.280	227°49'	Disch. Rake Element
429	PT	6.181	8.280	260° 8'	Disch. Rake Element
431	PT	6.181	8.440	20°47'	Disch. Rake Element
433	PT	6.181	8.440	52°57'	Disch. Rake Element

TABLE I (concluded)

ITEM NUMBER	TYPE SENSOR	LOCATION AXIAL	RADIAL	CIRCUMFERENTIAL	REMARKS
435	PT	6.181	8.440	195°29'	Disch. Rake Element
437	PT	6.181	8.440	227°49'	Disch. Rake Element
439	PT	6.181	8.440	260° 8'	Disch. Rake Element
441	Ref.				Not Used
443	Ref.				Atmos.
445	Ref.				15 PSIG Reference
447	Ref.				30 PSIG Reference
700	XPT	-0.25	OD	67°16'	Flush MTD. Kistler
701	XPT	0.00	OD	75°28'	Flush MTD. Kistler
702	XPT	0.25	OD	60°	Flush MTD. Kistler
703	XPT	0.50	OD	68°49'	Flush MTD. Kistler
704	XPT	0.75	OD	53°51'	Flush MTD. Kistler
705	XPT	1.00	OD	63°16'	Flush MTD. Kistler
706	XPT	1.25	OD	49° 8'	Flush MTD. Kistler
707	XPT	1.50	OD	59°23'	Flush MTD. Kistler
708					
709					
710	Prox.	1.25	OD	39°	Bentley Tran ducer

TABLE II

CALIBRATION OF SAMPLE THERMOCOUPLES

BATH SET PT °C[A]	°F[B]	AVG. OF 9 SAMPLES °F	MAX. SPREAD ± °F
65	148.1	148.4	0.1
100	211.4	210.9	0.1
150	300.8	301.4	0.4
175	346.5	346.4	0.5

A Oil Bath Set Pt.
B Mueller bridge readout converted to temperature.

TABLE III

CALIBRATION OF TEMPERATURE READOUT ELECTRONICS

SET PT. Avg+ °F	PRINTER OUTPUT Avg* °F	MAX. SPREAD ± °F
148.2	148.3	0.2
210.7	210.7	0.2
301.7	301.7	0.3
345.4	345.5	0.4

+ Average of two calibrated T/C's.
* Average of eight channels.

TABLE IV

MASS AVERAGED COMPRESSOR PERFORMANCE

TEST I.D.	RPM	FLOW (LB/SEC)	ROTOR PRESSURE RATIO	ROTOR EFFICIENCY	STAGE PRESSURE RATIO	STAGE EFFICIENCY
212030109540	9152.8	11.650	1.2310	.9330	1.1840	.7840
212030215440	9154.4	11.220	1.2391	.9190	1.2150	.8340
212030314340	9144.2	10.220	1.2500	.9070	1.2330	.8490
212030415940	9137.7	9.400	1.2551	.8760	1.2380	.8230
212030516240	9144.6	8.910	1.2540	.8600	1.2340	.7970
212030616440	9144.3	8.620	1.2550	.8550	1.2340	.7980
212030815050	10139.5	13.040	1.4030	.9100	1.3710	.8350
212030915750	10132.5	12.310	1.4160	.8980	1.3840	.8290
212030916250	10130.3	11.260	1.4160	.8680	1.3810	.8020
212031015950	10213.4	13.170	1.4100	.9400	1.3720	.8340
212031114250	10133.6	13.450	1.4341	.9210	1.3510	.8130
212031212250	10133.3	13.790	1.3991	.9250	1.3020	.7200
212031415060	12241.3	15.940	1.[illegible]	.9100	1.5400	.7950
212031514360	12223.3	15.640	1.63[illegible]	.9110	1.4910	.7350
212031612360	12225.2	15.630	1.6290	.9100	1.4400	.6600
212031715550	12234.2	15.010	1.5430	.9010	1.5690	.8160
212031815460	12231.7	14.570	1.[illegible]31	.8600	1.5770	.8060
212031916360	12240.7	13.870	1.6371	.8620	1.5730	.7870
212070215970	14321.4	17.640	1.9130	.8300	1.7230	.7320
212070314770	14307.9	17.690	1.9130	.8880	1.7010	.7110
212070615070	14235.4	17.650	1.9130	.8890	1.7230	.7310
212070715570	14297.1	17.420	1.9200	.8650	1.7840	.7770
212070815970	14291.3	17.270	1.9210	.8840	1.8040	.7920
212070916170	14280.5	16.710	1.9190	.8630	1.8100	.7840
212071015040	15249.0	19.960	2.2771	.8790	1.9640	.7060
212071315030	15315.1	19.870	2.2781	.8750	1.9620	.7010
212071415340	15217.3	19.730	2.2790	.8750	2.0060	.7270
212071515980	15322.5	19.690	2.2751	.8740	2.0520	.7530
301130915585	17344.4	20.729	2.4735	.8672	2.1497	.7157
301131015585	17341.4	20.501	2.4815	.8662	2.1865	.7317
301130615055	17313.5	21.039	2.4792	.8694	2.1000	.6932
301130815485	17303.2	20.760	2.4739	.8690	2.1239	.7066
301131515590	18373.0	21.900	2.6950	.8460	2.2860	.6890
301131615790	18375.6	21.800	2.6950	.8460	2.3060	.6980
301131715590	18335.4	21.750	2.6970	.8450	2.3240	.7030
301131415290	18337.4	21.830	2.6961	.8470	2.2560	.6730
301230615095	18354.4	23.8[illegible]0	2.9991	.8450	2.4270	.6610
301230415395	18350.1	23.950	2.9871	.8450	2.4530	.6730
301230515595	18378.7	23.740	2.9971	.8430	2.4920	.6820
301231515500	20413.6	25.559	[illegible].3521	.8441	2.6994	.6709
301231615700	20410.9	25.633	3.3441	.8427	2.7076	.6737
301231315200	20413.8	25.727	3.[illegible]33	.8456	2.6445	.6568
301231415400	20422.3	26.043	3.[illegible]21	.8458	2.6820	.6652
301240315602	20733.4	26.401	3.4764	.8455	2.7410	.6603
301240315502	20731.1	26.208	3.4711	.8429	2.7731	.6680

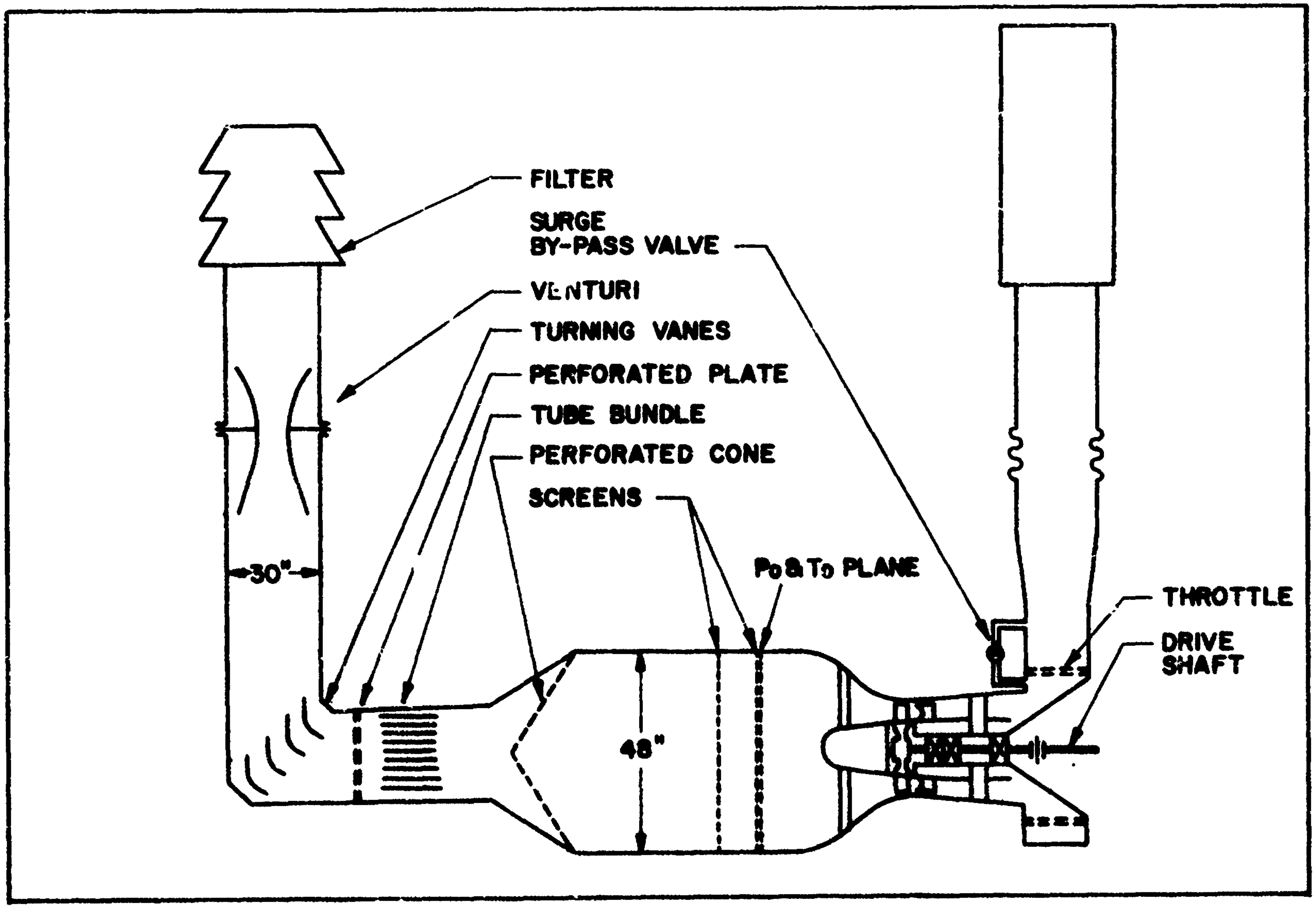


FIGURE 1. COMPRESSOR FACILITY FLOW PATH

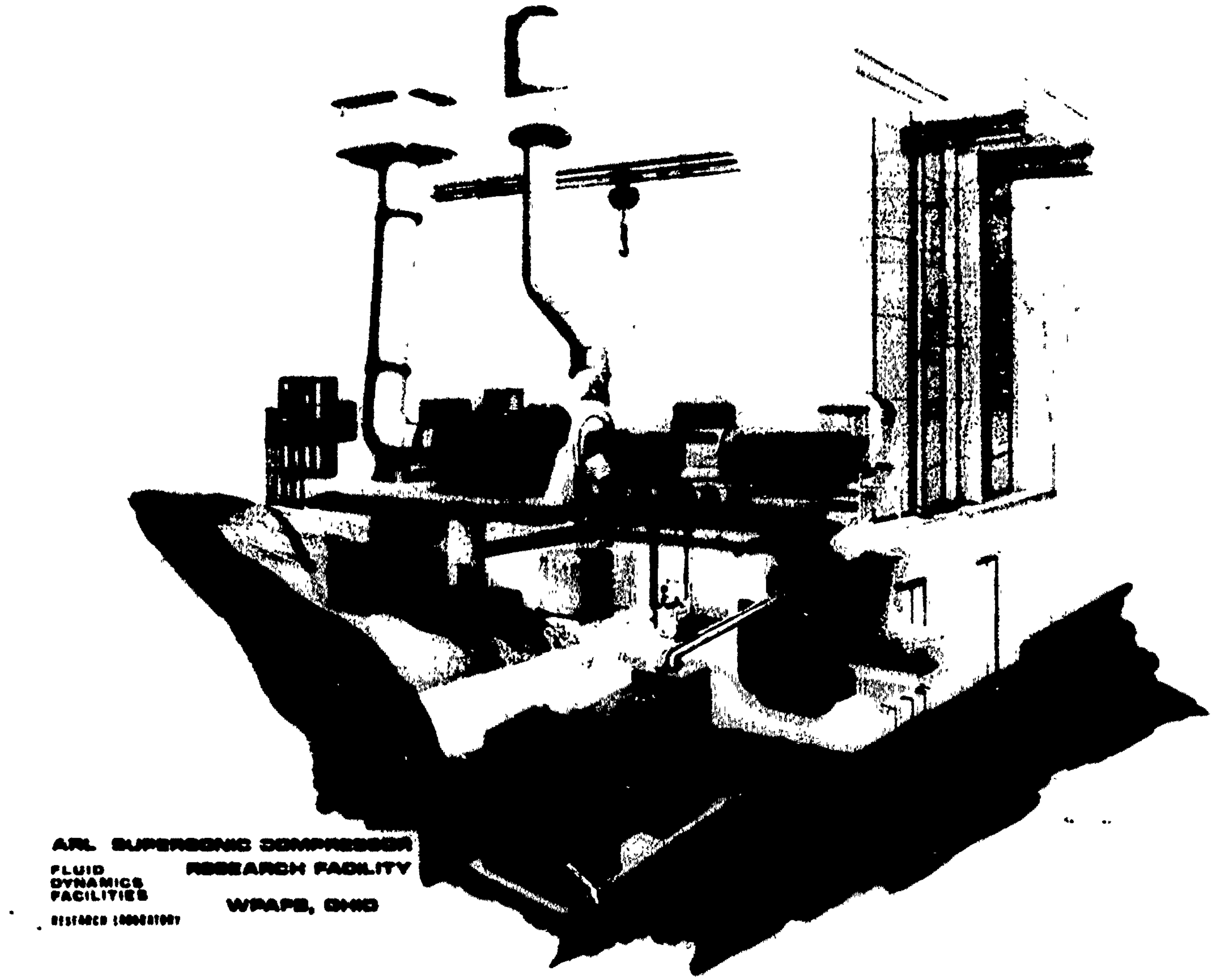


FIGURE 2. TEST FACILITY

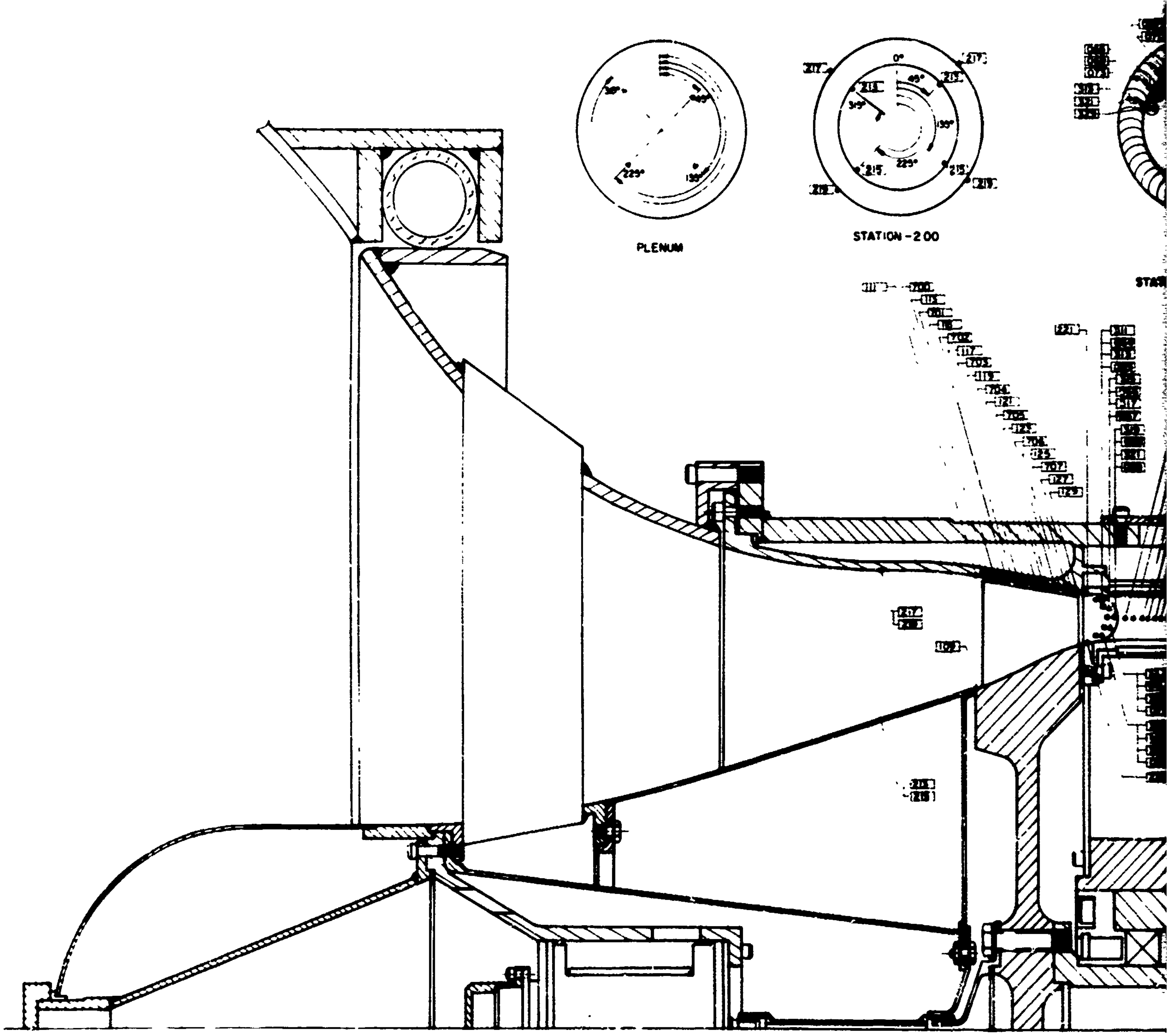
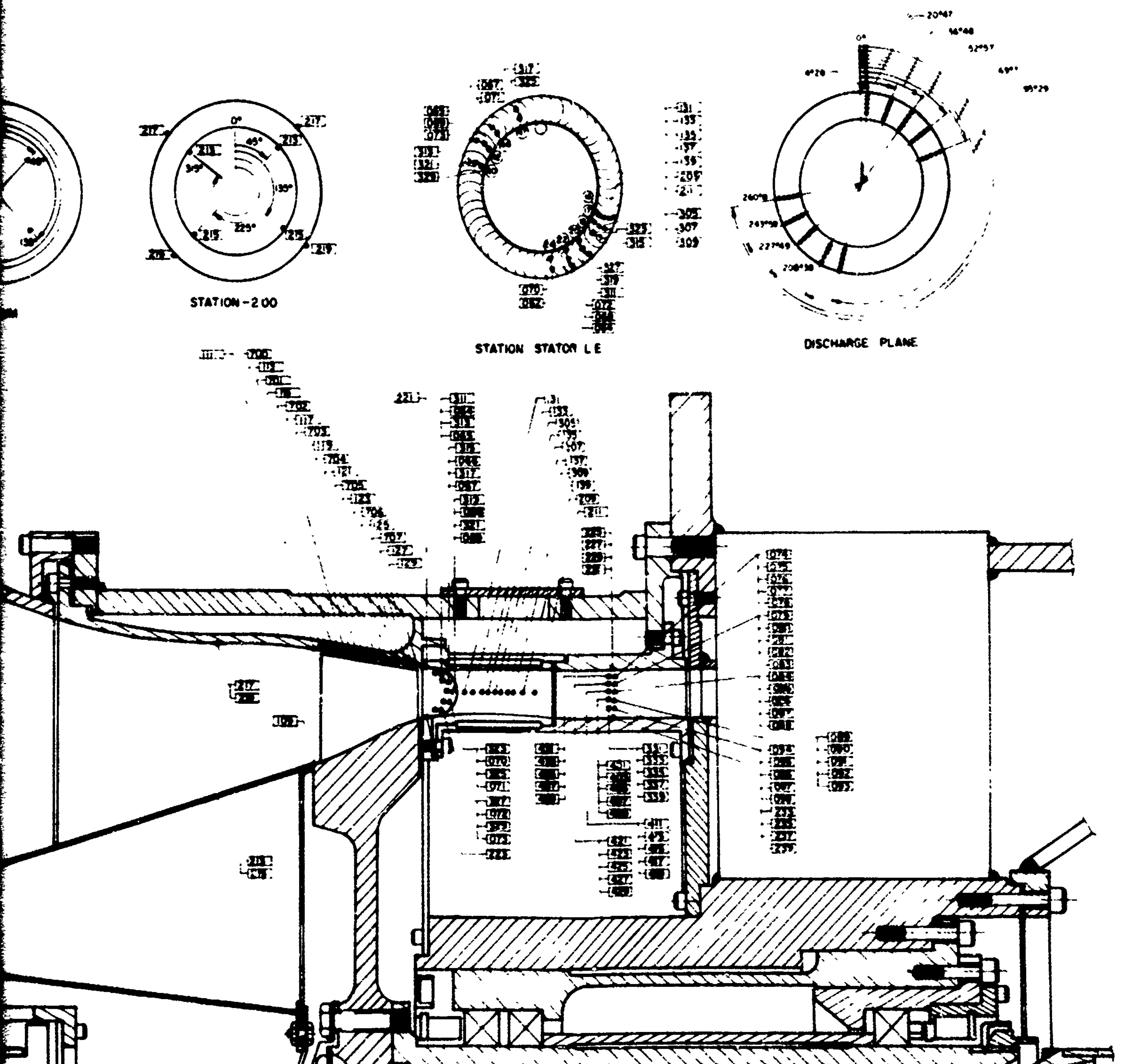


FIGURE 3. COMPRESSOR CROSS SECTION WITH INSTRUMENTA
LOCATIONS



3. COMPRESSOR CROSS SECTION WITH INSTRUMENTATION LOCATIONS

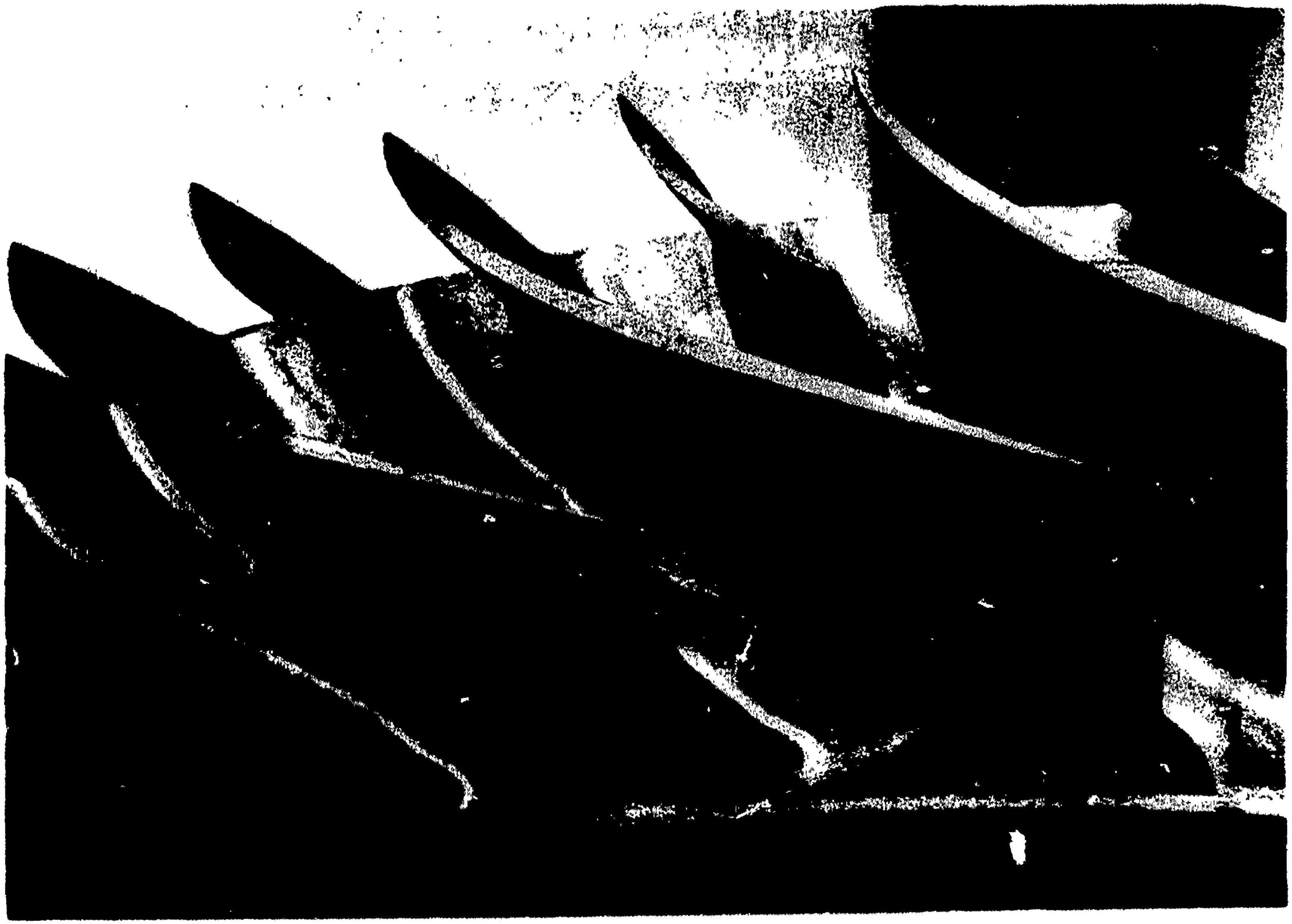


FIGURE 4. ROTOR WITH SPLITTER VANES

FIGURE 5. VEHICLE INSTRUMENTATION BULKHEAD

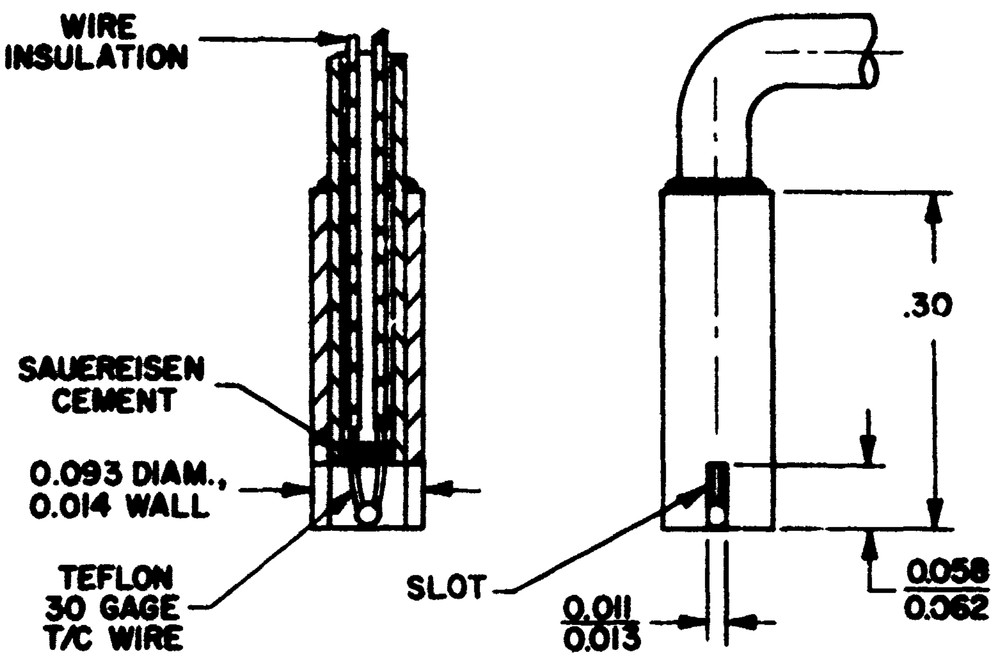


FIGURE 6. SLOT VENTED TEMPERATURE PROBE DESIGN

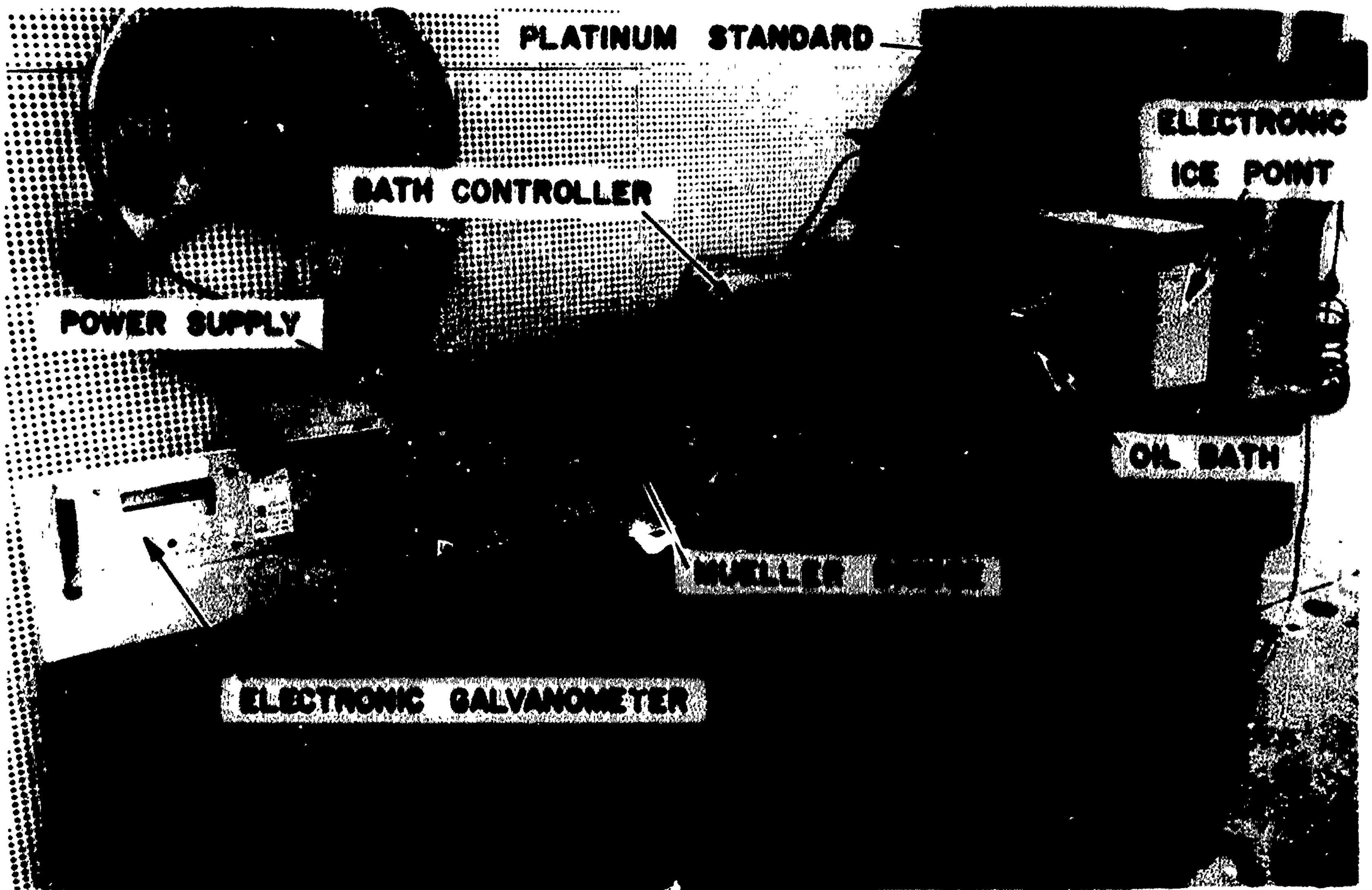


FIGURE 7. TEMPERATURE CALIBRATION SETUP

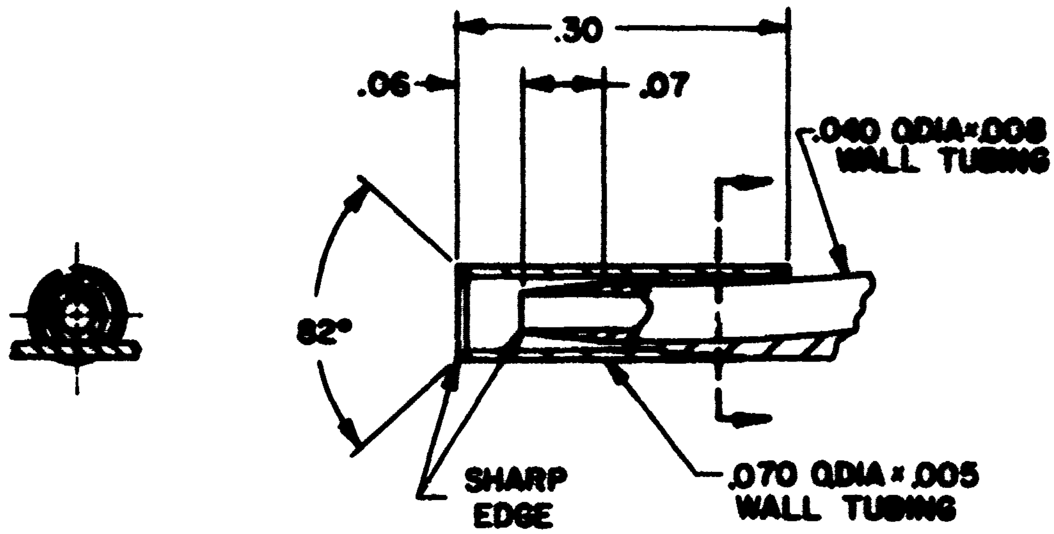


FIGURE 8. KIEL STAGNATION TUBE DESIGN

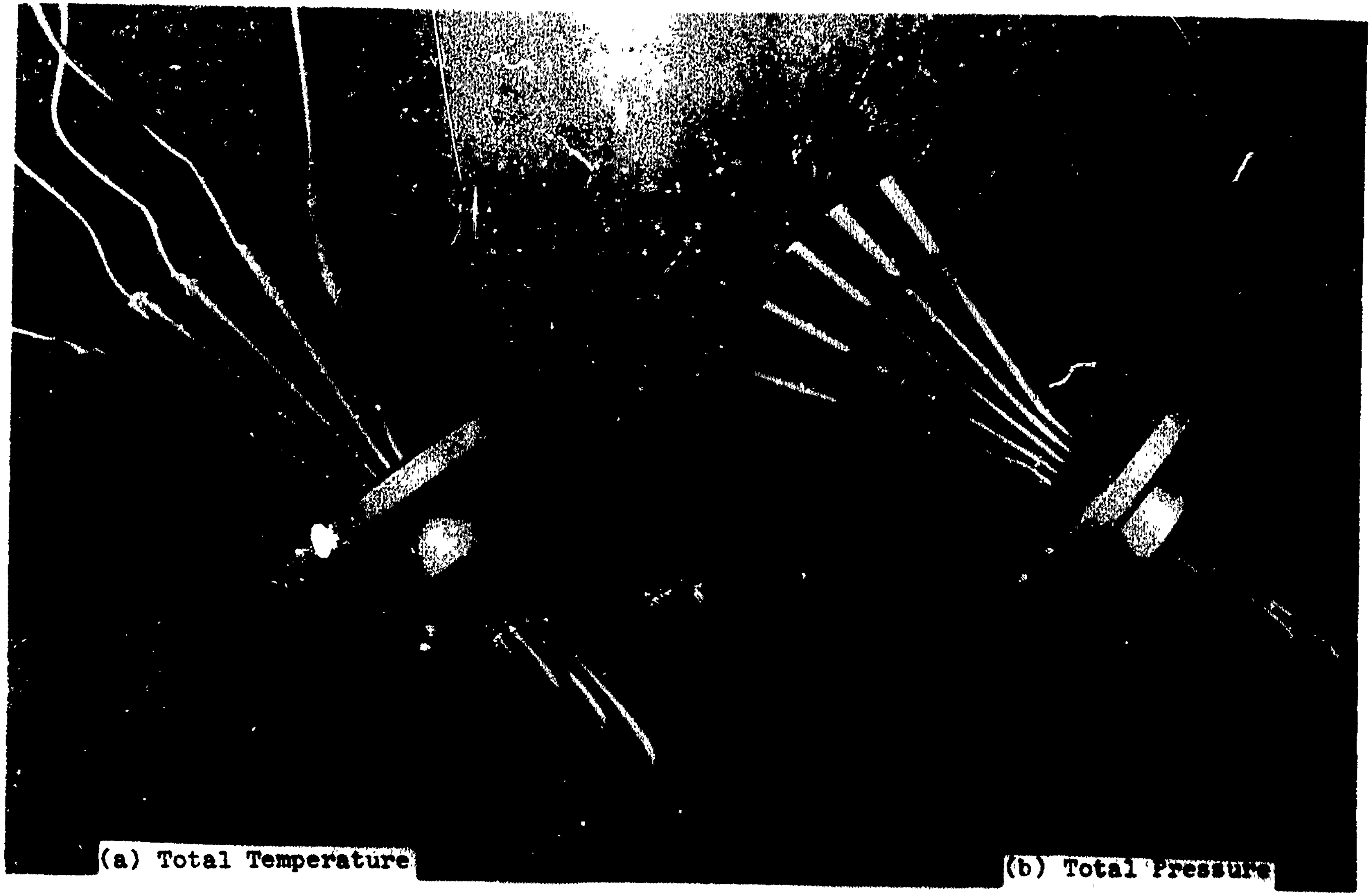


FIGURE 9. INSTRUMENTATION RAKES

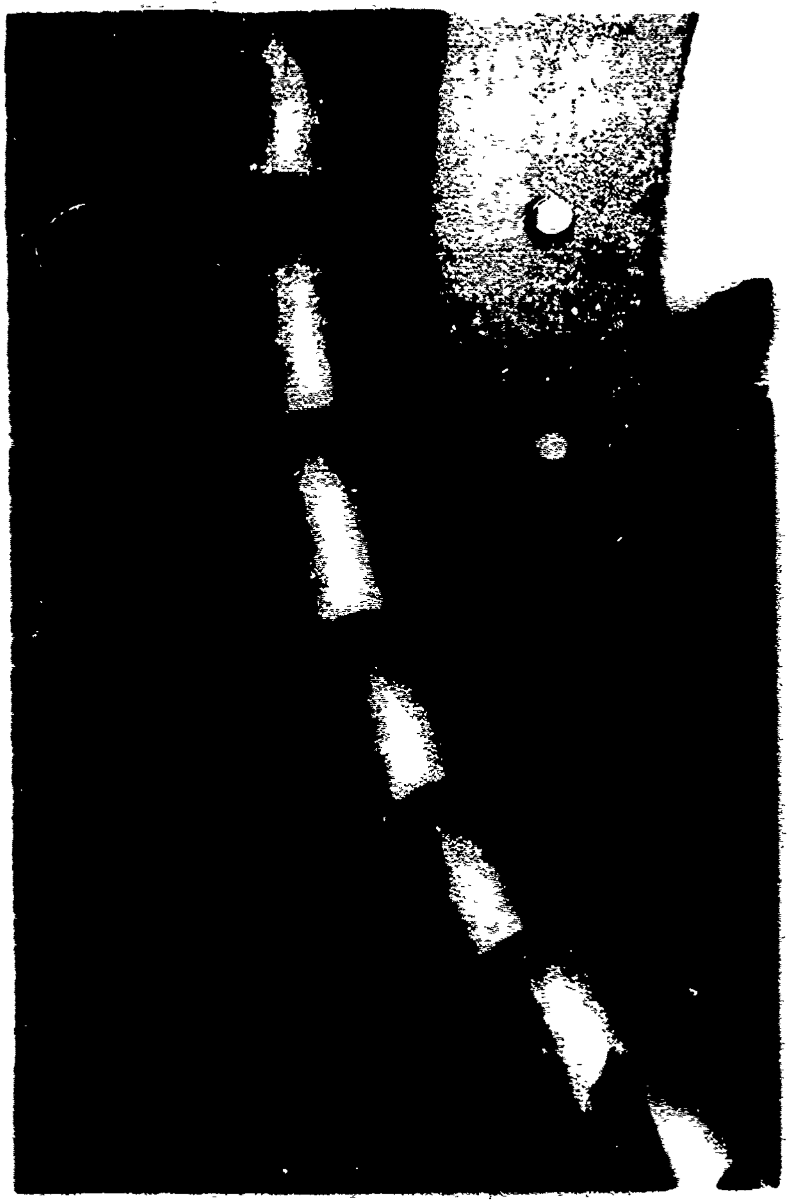


FIGURE 10. VANE-MOUNTED INSTRUMENTATION

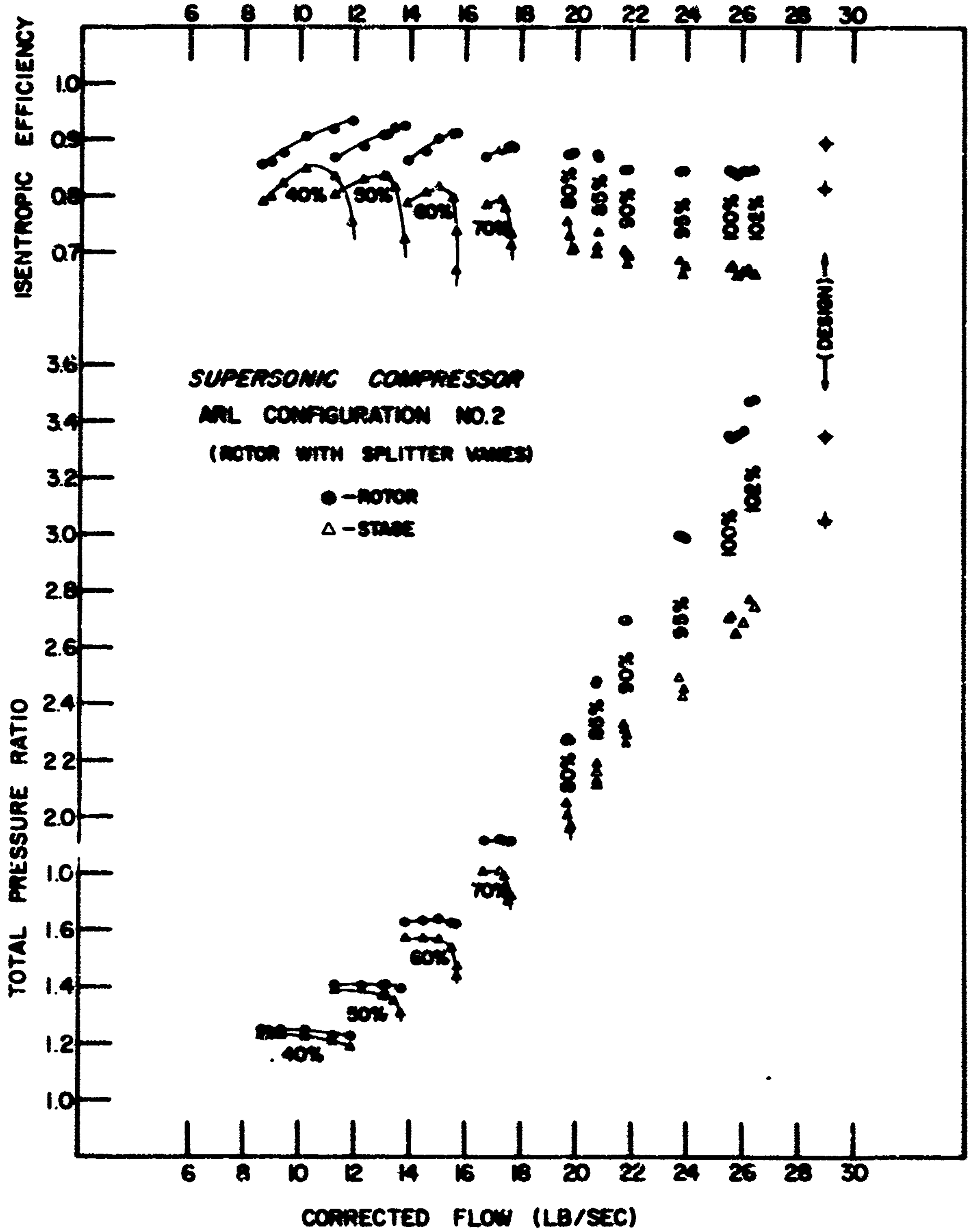


FIGURE 11. COMPRESSOR PERFORMANCE MAP

TABLE V

IDENTIFICATION OF SYMBOLS
FOR 40%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212050109840	⊙
212050213440	▽
212050315040	+
212050415940	×
212050516240	◇
212050616440	⊥

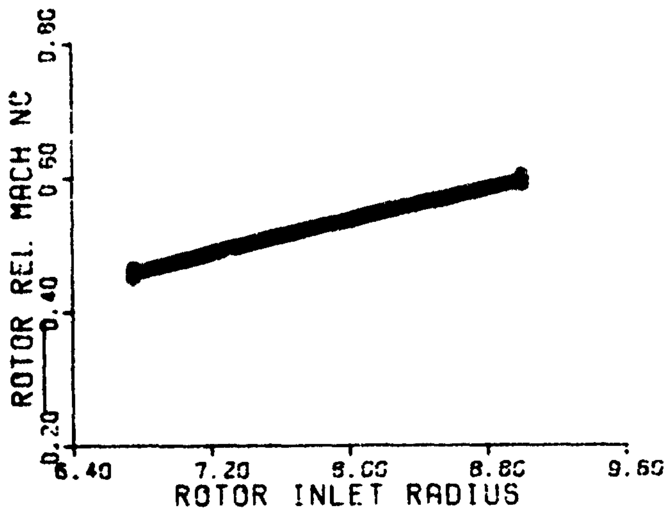


FIGURE 12. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (40% SPEED)

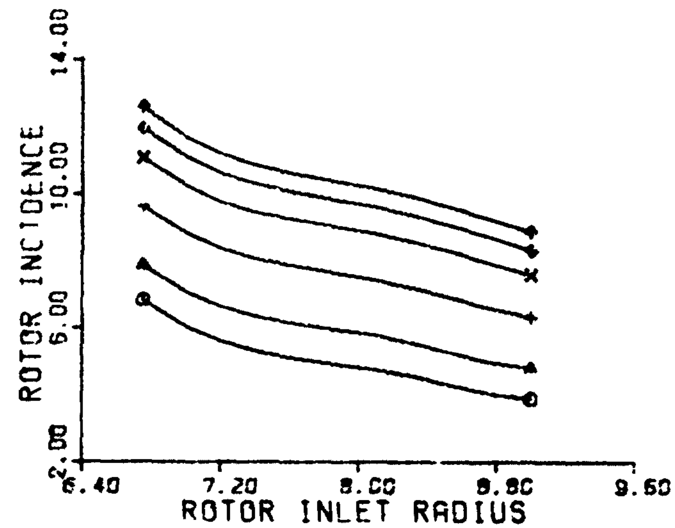


FIGURE 13. ROTOR INCIDENCE VS INLET RADIUS (40% SPEED)

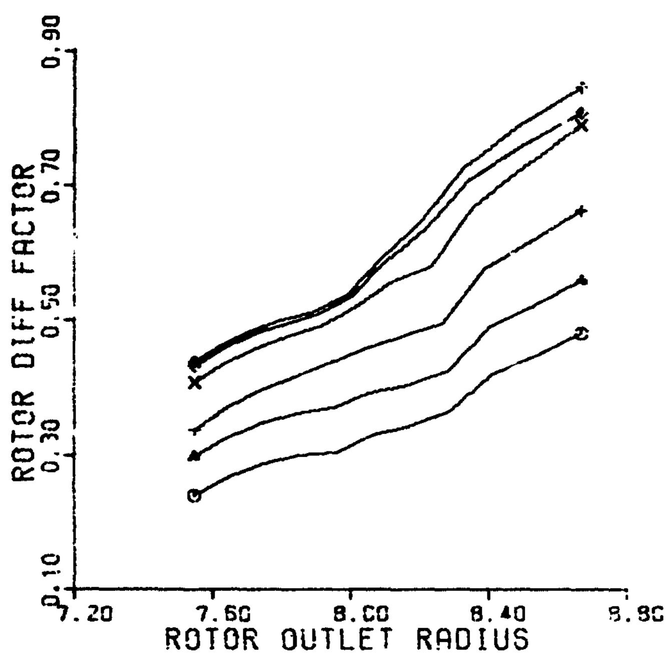


FIGURE 14. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (40% SPEED)

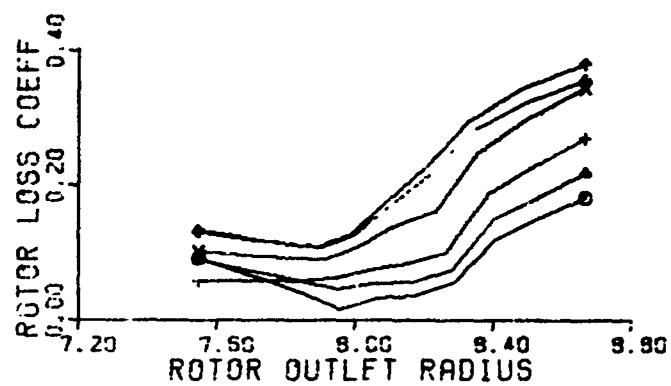


FIGURE 15. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (40% SPEED)

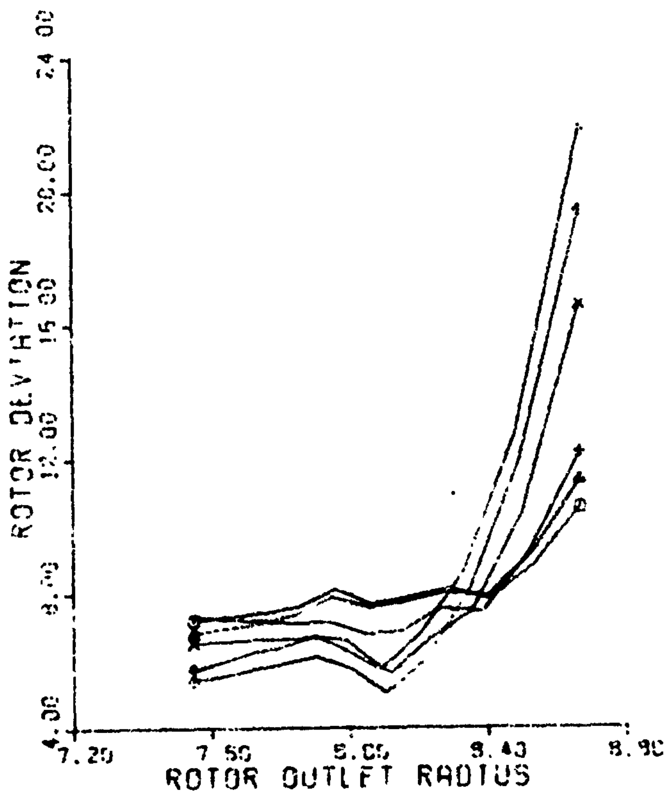


FIGURE 16. ROTOR DEVIATION VS OUTLET RADIUS (40% SPEED)

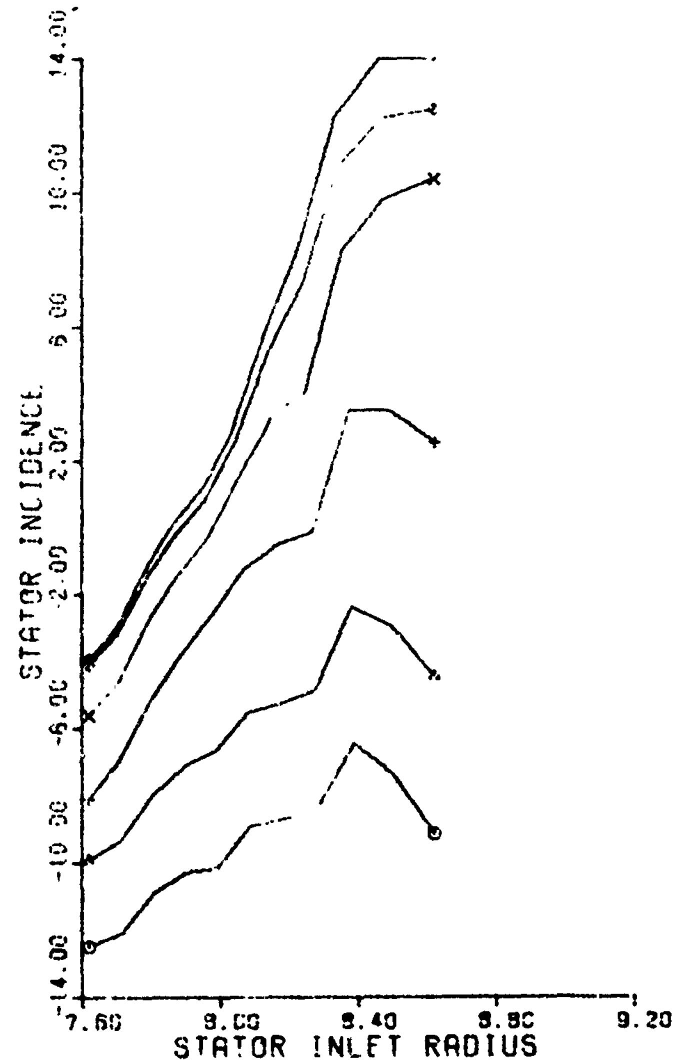


FIGURE 17. STATOR INCIDENCE VS INLET RADIUS (40% SPEED)

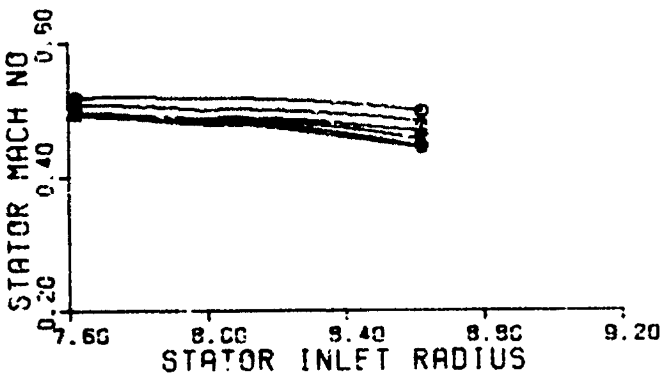


FIGURE 18. STATOR MACH NUMBER VS INLET RADIUS (40% SPEED)

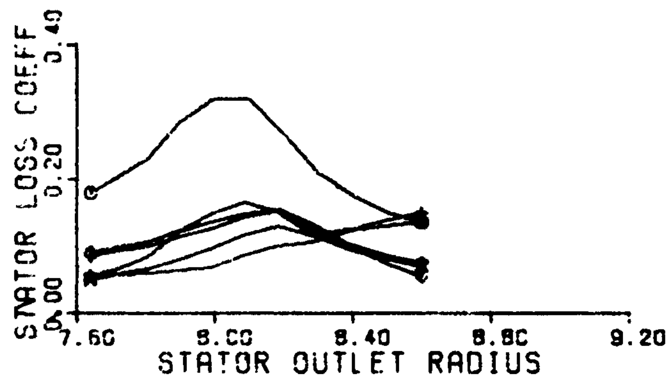


FIGURE 19. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (40% SPEED)

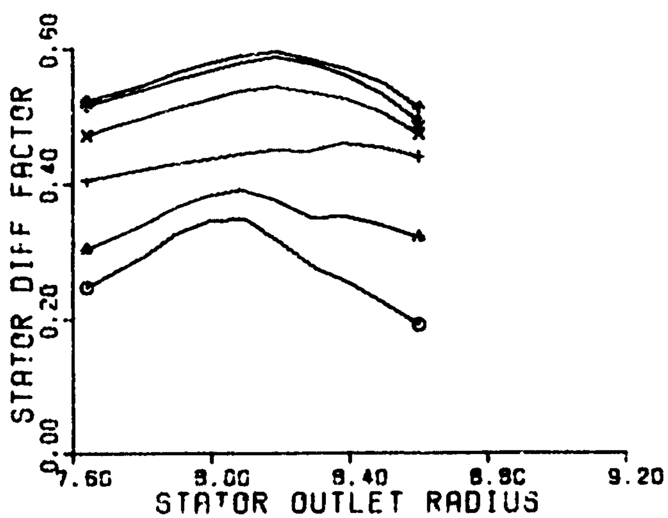


FIGURE 20. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (40% SPEED)

TABLE VI

IDENTIFICATION OF SYMBOLS
FOR 50%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212050615050	○
212050815750	▽
212050916250	+
212051015050	×
212051114250	◇
212051212250	✣

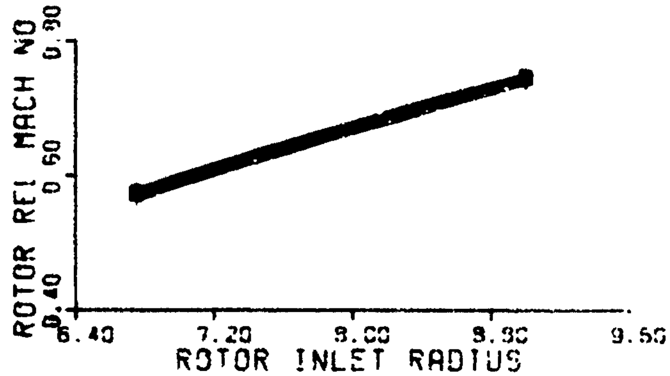


FIGURE 21. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (50% SPEED)

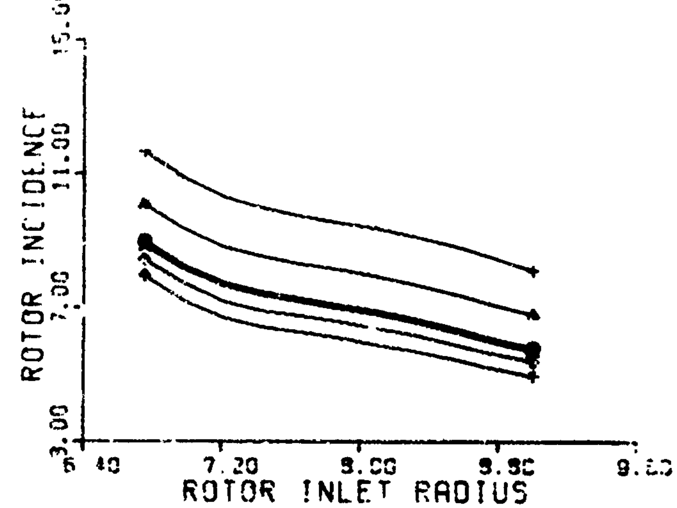


FIGURE 22. ROTOR INCIDENCE VS INLET RADIUS (50% SPEED)

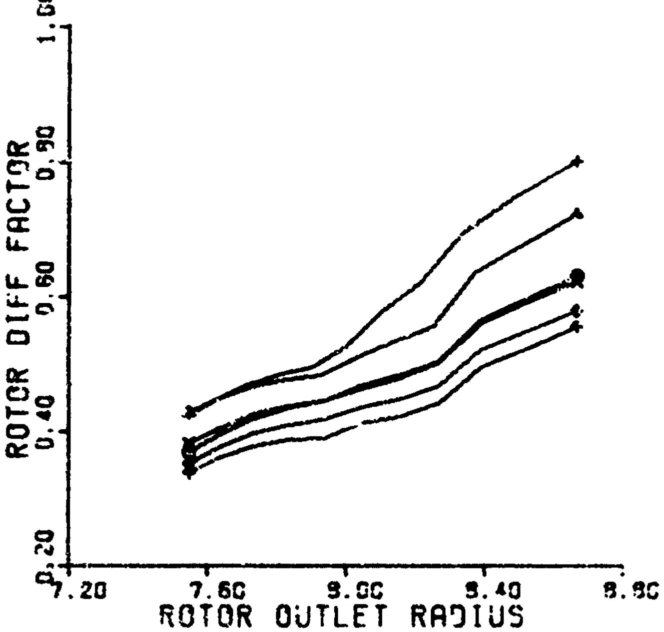


FIGURE 23. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (50% SPEED)

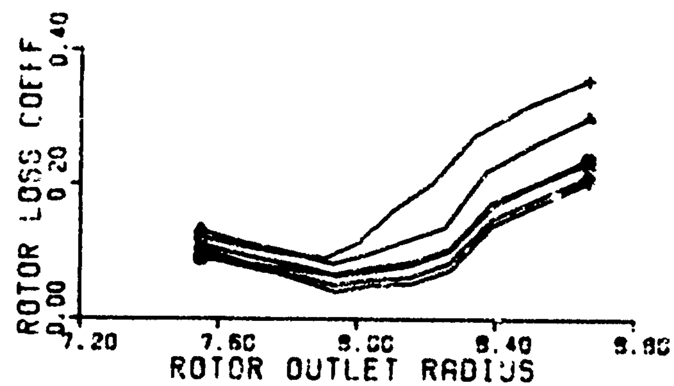


FIGURE 24. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (50% SPEED)

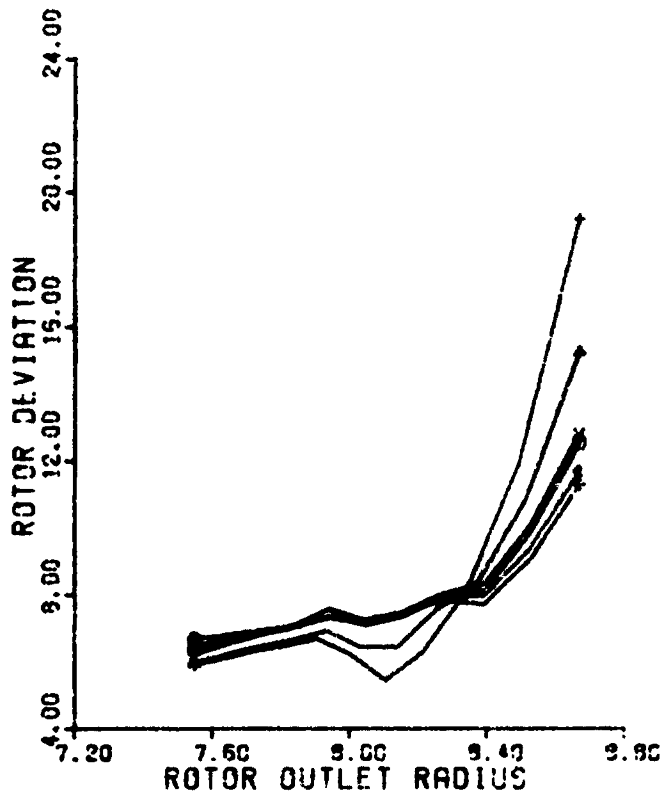


FIGURE 25. ROTOR DEVIATION VS OUTLET RADIUS (50% SPEED)

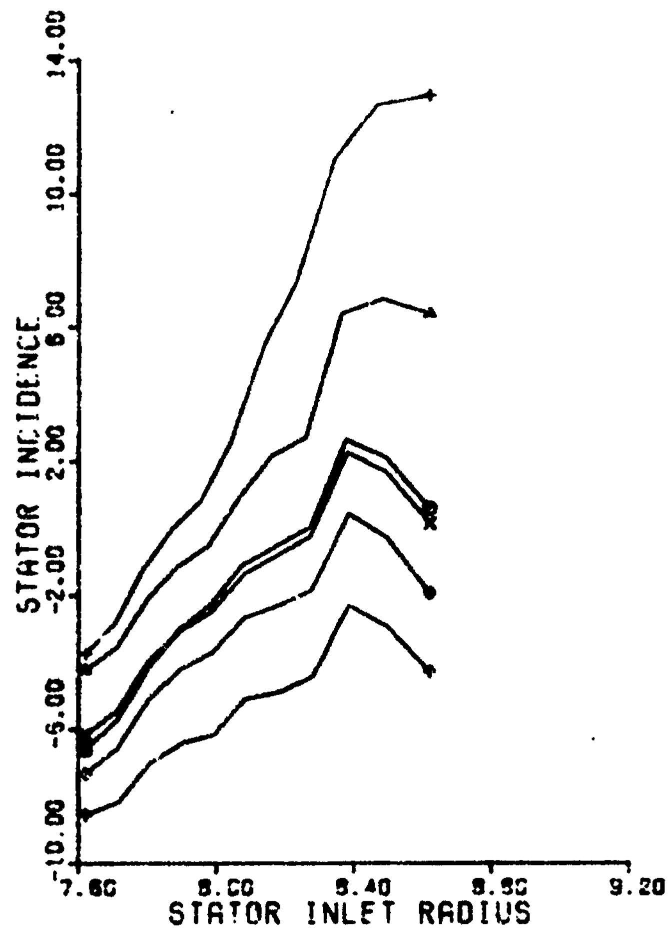


FIGURE 26. STATOR INCIDENCE VS INLET RADIUS (50% SPEED)

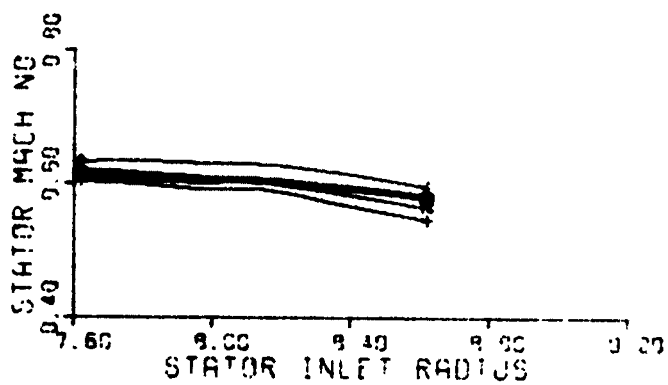


FIGURE 27. STATOR MACH NUMBER VS INLET RADIUS (50% SPEED)

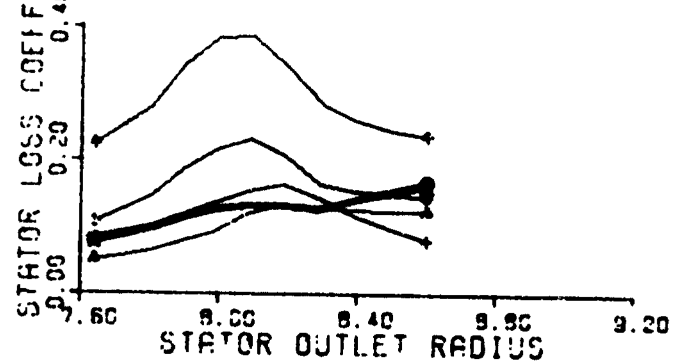


FIGURE 28. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (50% SPEED)

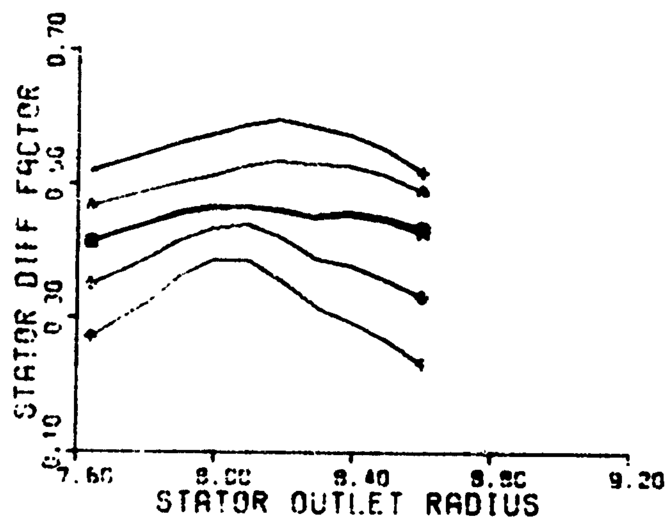


FIGURE 29. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (50% SPEED)

TABLE VII

IDENTIFICATION OF SYMBOLS
FOR 60%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212051415060	⊙
212051514360	▽
212051612960	+
212051715560	×
212051815960	◇
212051916360	⊕

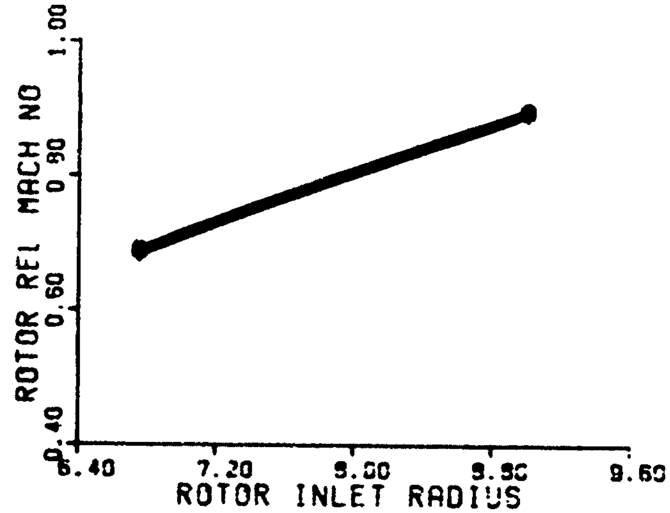


FIGURE 30. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (60% SPEED)

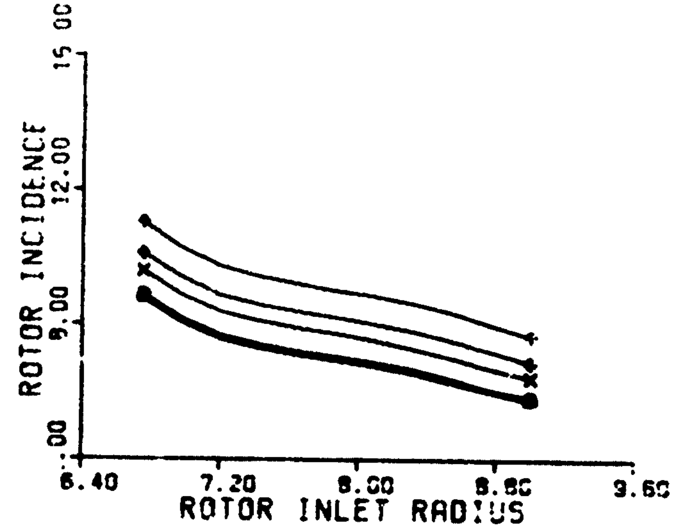


FIGURE 31. ROTOR INCIDENCE VS INLET RADIUS (60% SPEED)

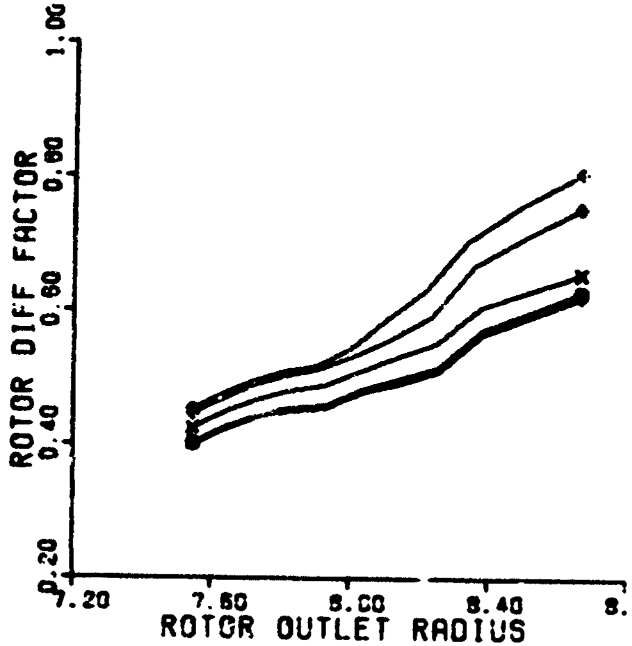


FIGURE 32. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (60% SPEED)

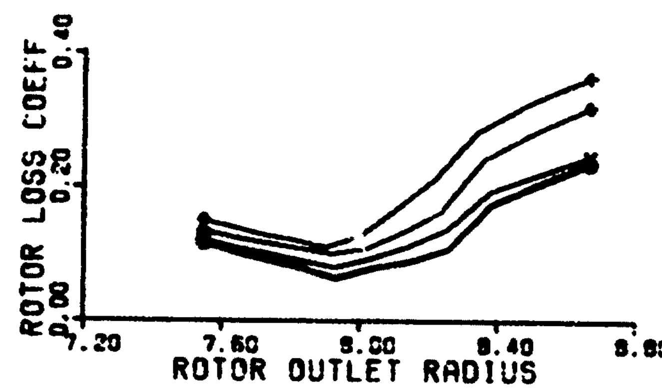


FIGURE 33. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (60% SPEED)

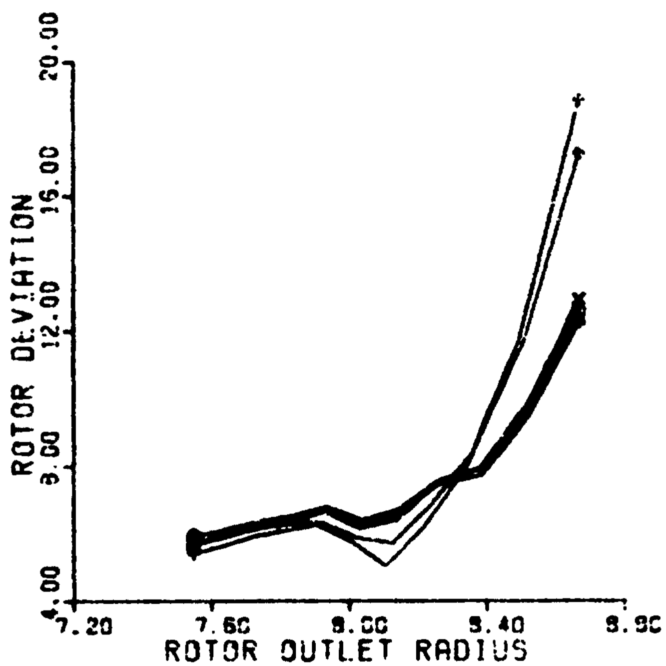


FIGURE 34. ROTOR DEVIATION VS OUTLET RADIUS (60% SPEED)

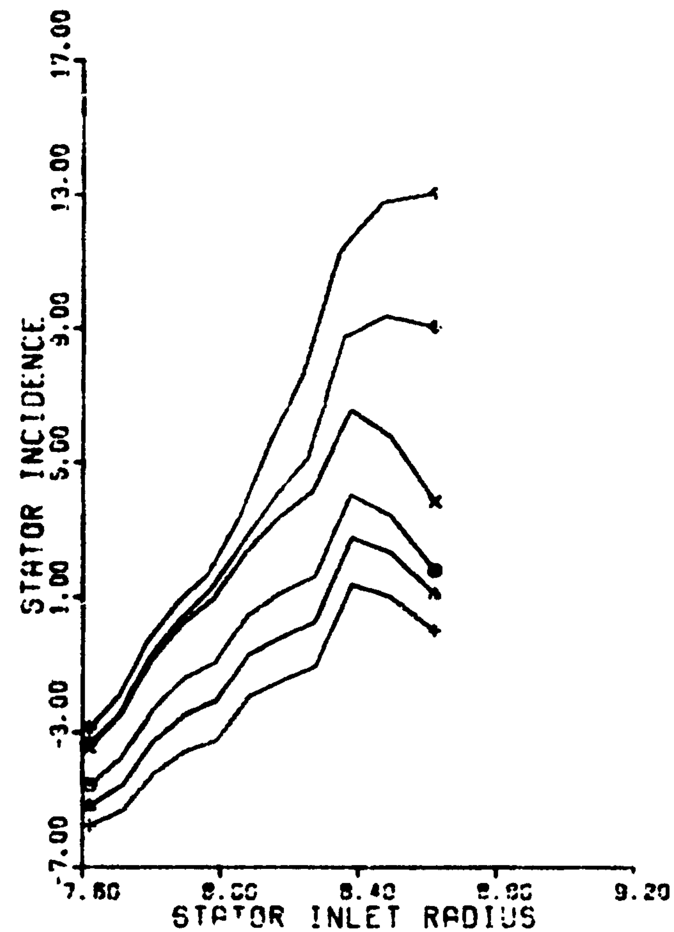


FIGURE 35. STATOR INCIDENCE VS INLET RADIUS (60% SPEED)

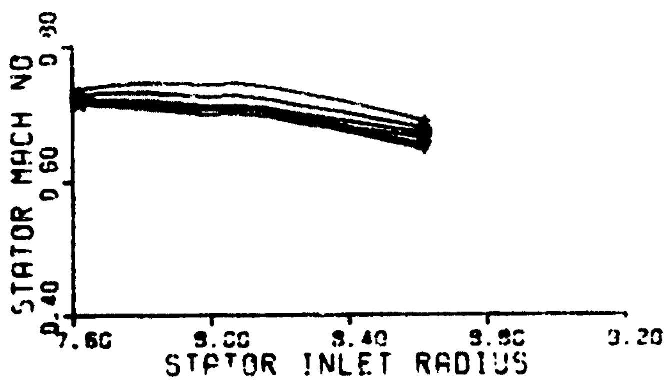


FIGURE 36. STATOR MACH NUMBER VS INLET RADIUS (60% SPEED)

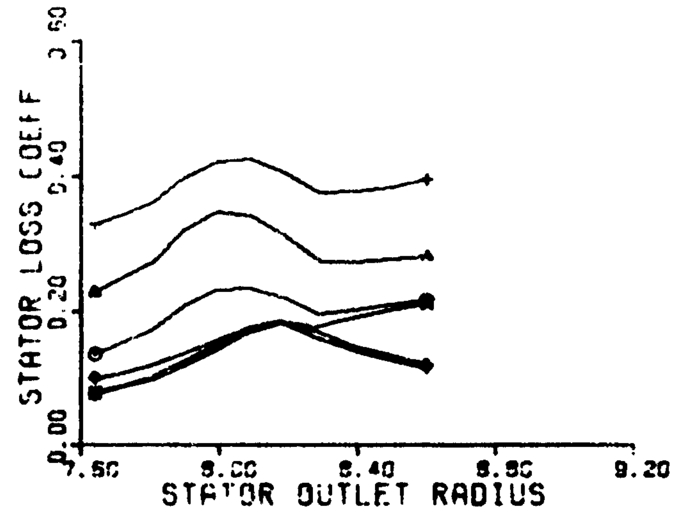


FIGURE 37. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (60% SPEED)

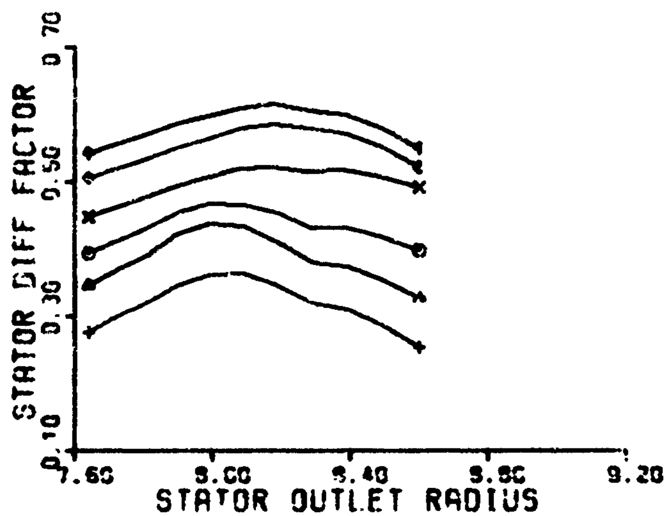


FIGURE 38. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (60% SPEED)

TABLE VIII

IDENTIFICATION OF SYMBOLS
FOR 70%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212070215070	○
212070314770	▽
212070615070	+
212070715670	×
212070815970	◇
212070916170	↓

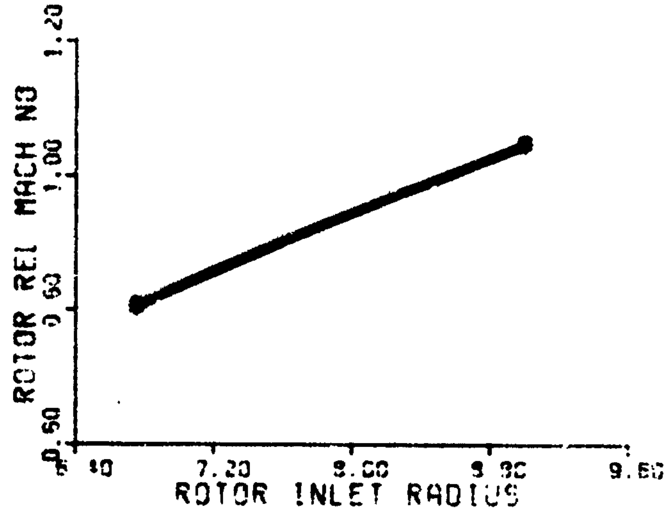


FIGURE 39. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (70% SPEED)

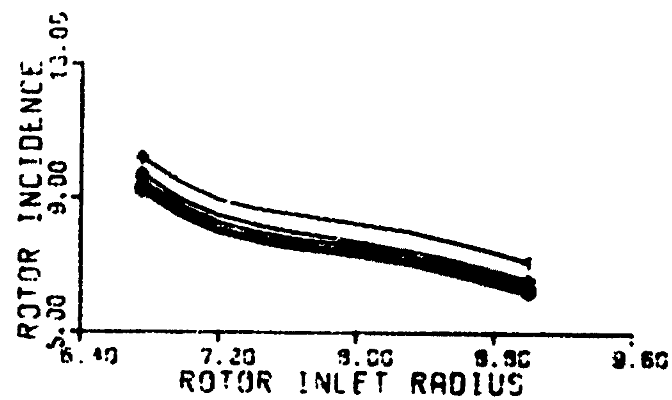


FIGURE 40. ROTOR INCIDENCE VS INLET RADIUS (70% SPEED)

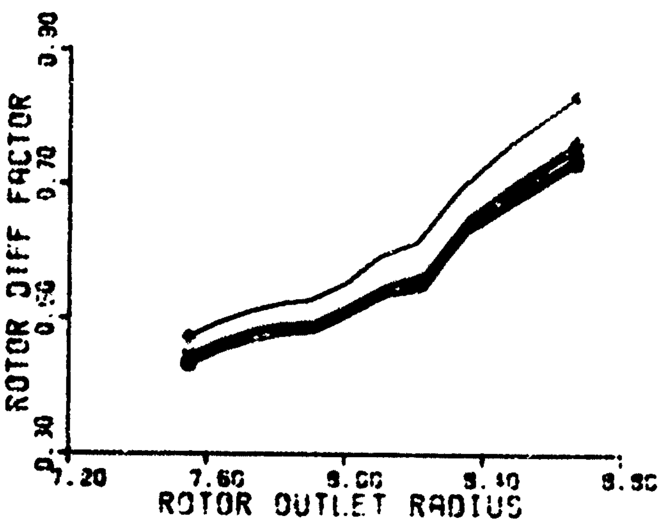


FIGURE 41. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (70% SPEED)

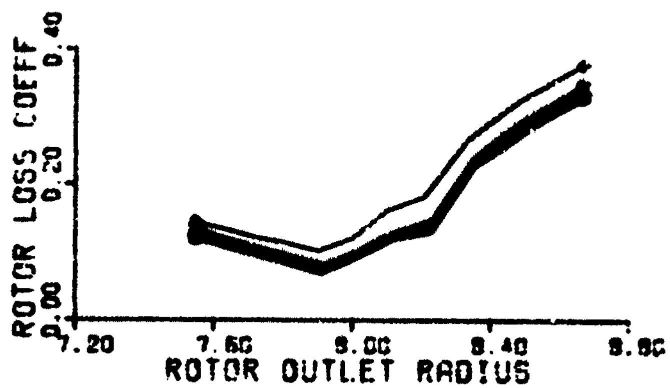


FIGURE 42. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (70% SPEED)

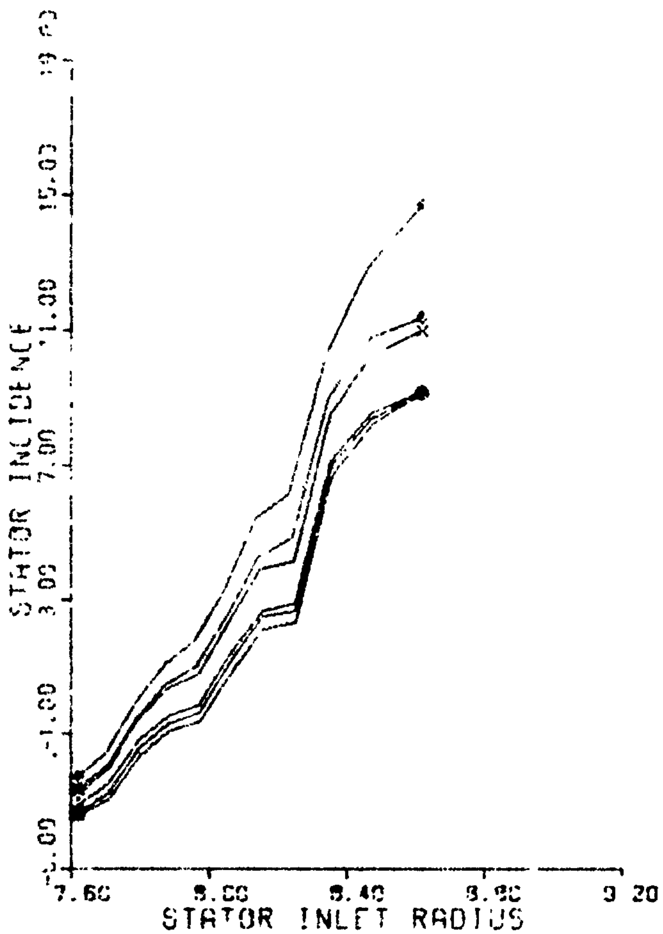


FIGURE 44. STATOR INCIDENCE VS INLET RADIUS (70% SPEED)

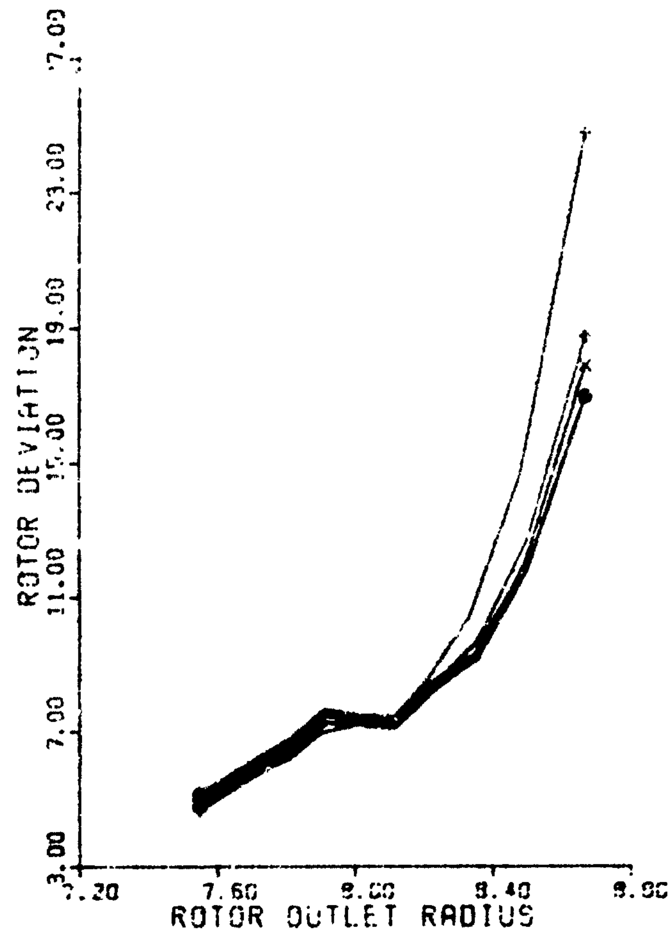


FIGURE 43. ROTOR DEVIATION VS OUTLET RADIUS (70% RADIUS)

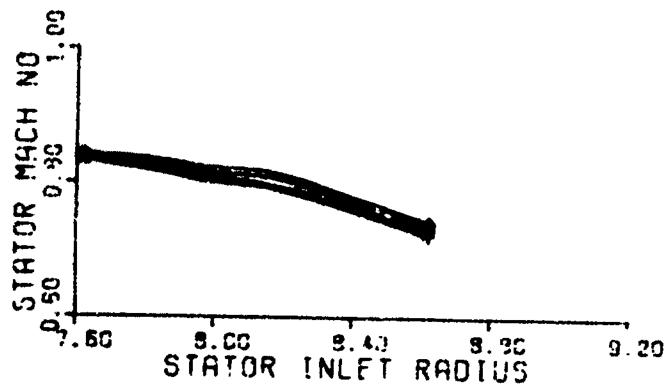


FIGURE 45. STATOR MACH NUMBER VS INLET RADIUS (70% SPEED)

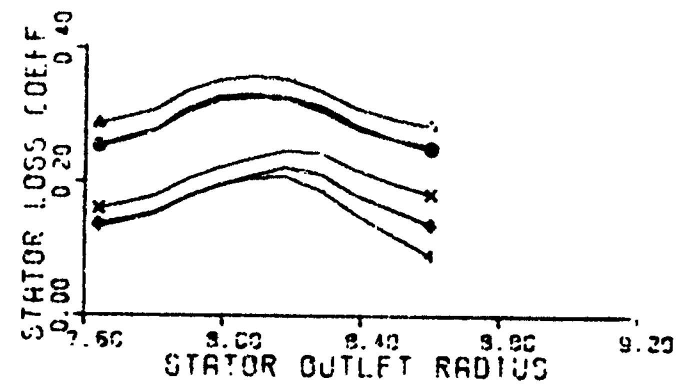


FIGURE 46. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (70% SPEED)

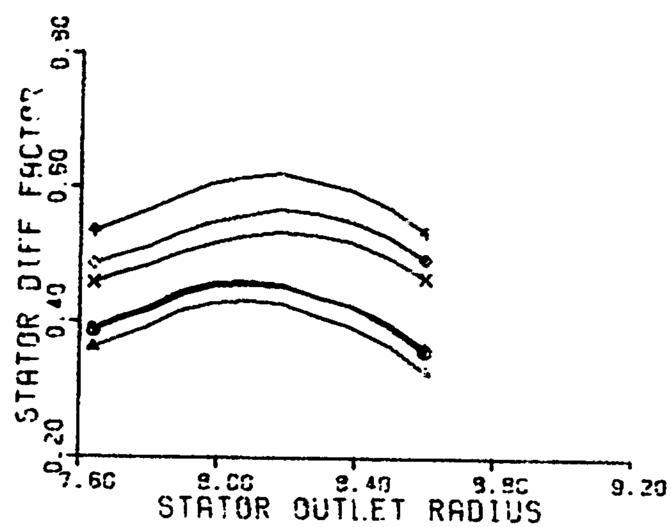


FIGURE 47 STATOR DIFFUSION FACTOR VS OUTLET RADIUS (70% SPEED)

TABLE IX

IDENTIFICATION OF SYMBOLS
FOR 80%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212071015080	⦶
212071315080	⩡
212071415580	+
212071515980	×

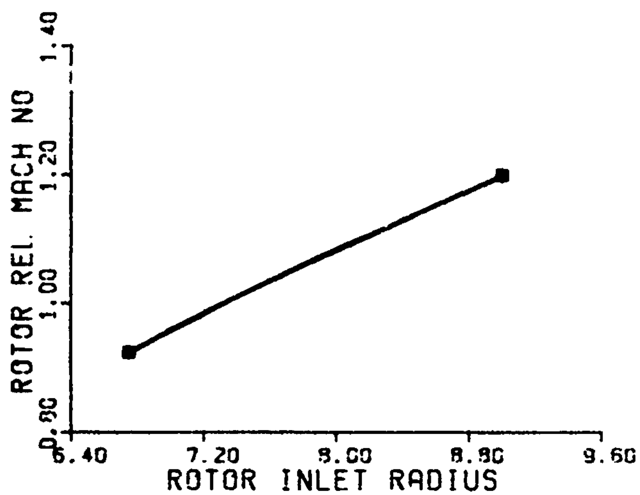


FIGURE 48. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (80% SPEED)

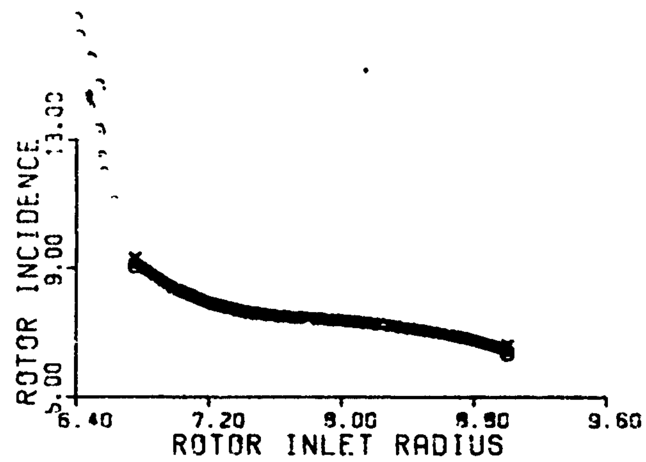


FIGURE 49 ROTOR INCIDENCE VS INLET RADIUS (80% SPEED)

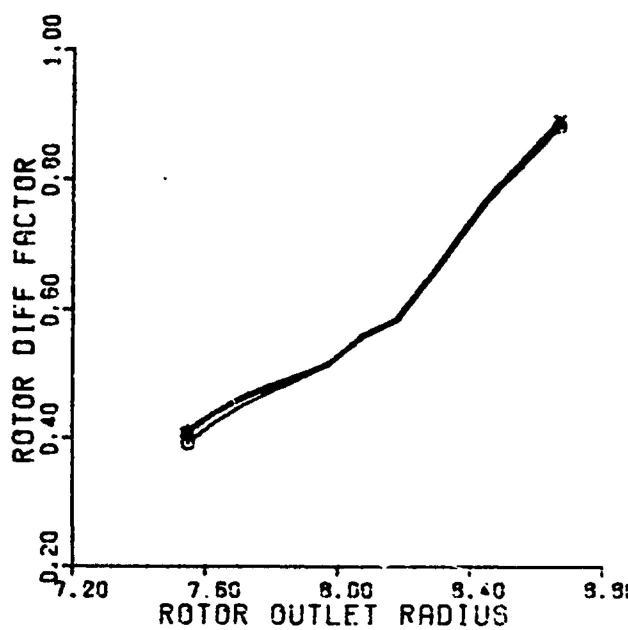


FIGURE 50 ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (80% SPEED)

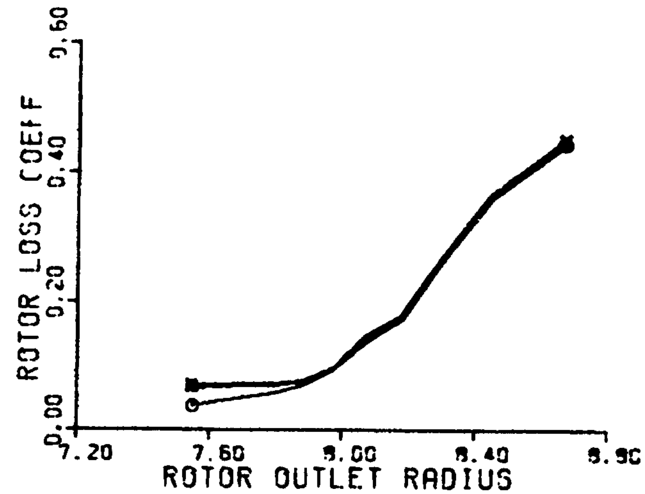


FIGURE 51. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (80% SPEED)

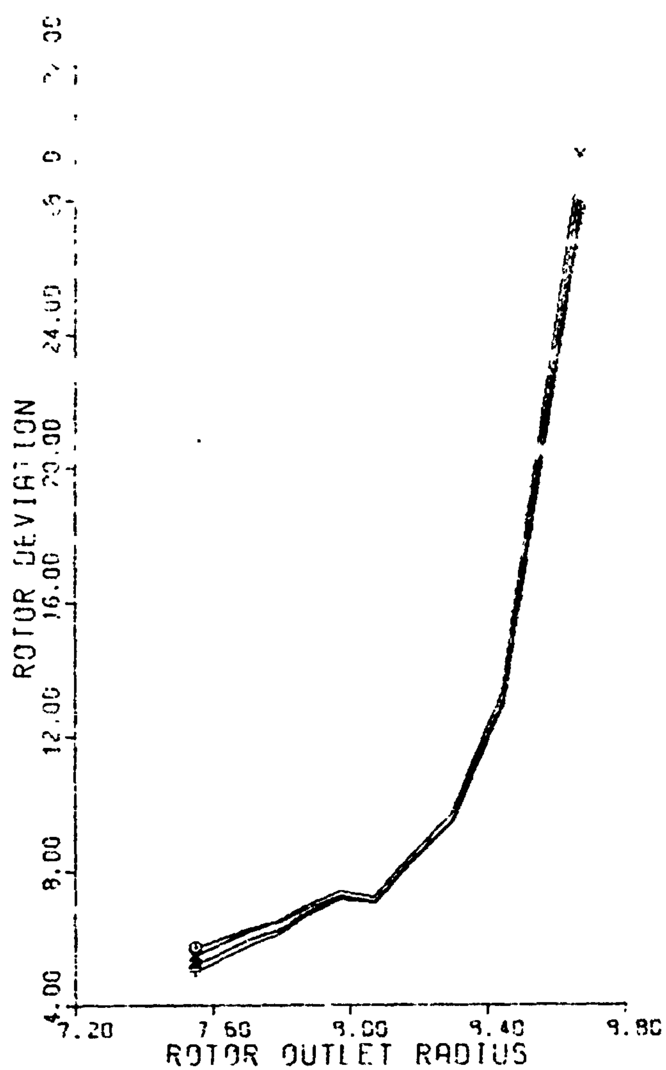


FIGURE 52. ROTOR DEVIATION VS OUTLET RADIUS
(80% SPEED)

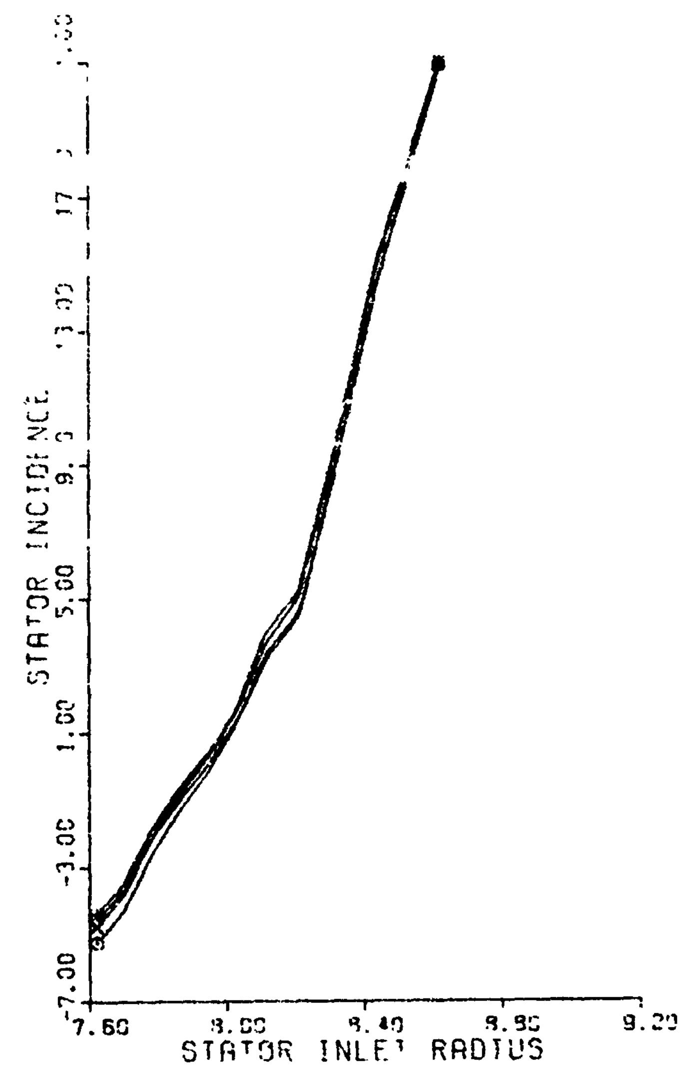


FIGURE 53. STATOR INCIDENCE VS INLET RADIUS
(80% SPEED)

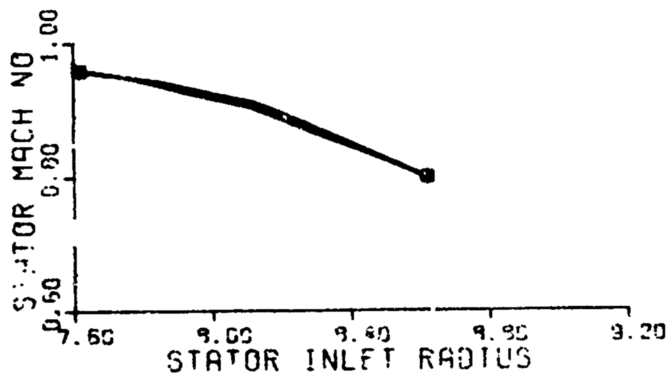


FIGURE 54. STATOR MACH NUMBER VS INLET RADIUS (80% SPEED)

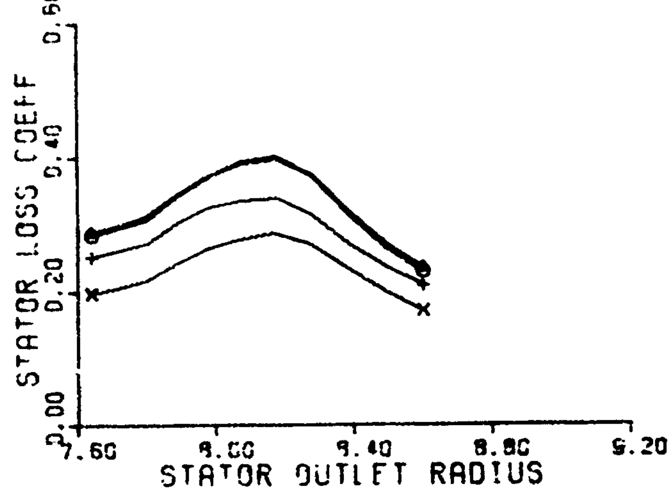


FIGURE 55. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (80% SPEED)

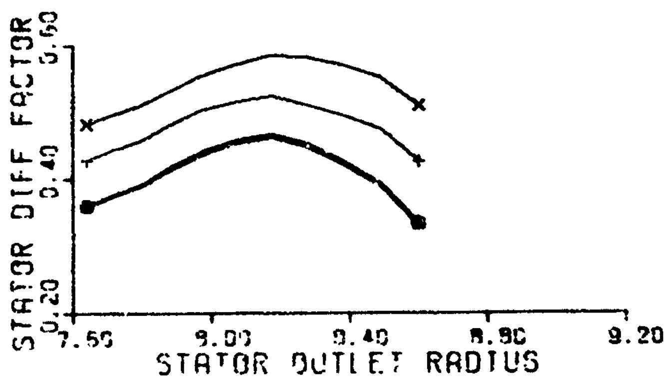


FIGURE 56. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (80% SPEED)

TABLE X

IDENTIFICATION OF SYMBOLS FOR 85%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301180915685	⏀
301181015885	⊽
301180615085	⊤
301180815385	X

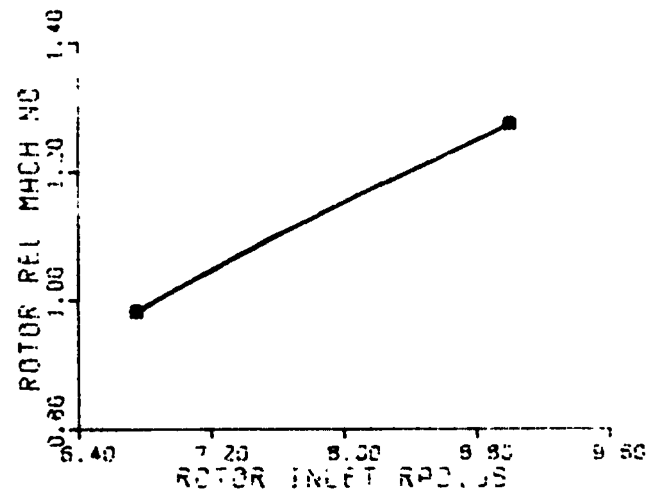


FIGURE 57. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (85% SPEED)

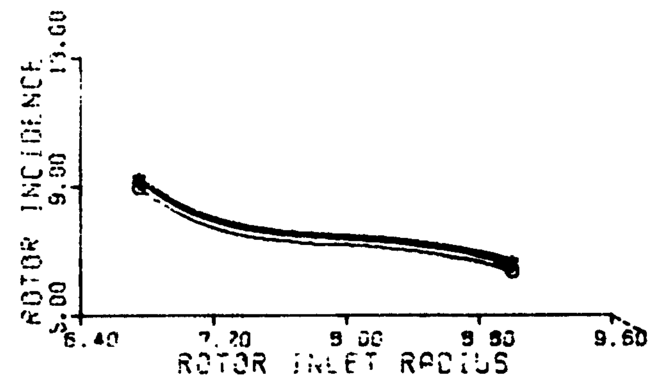
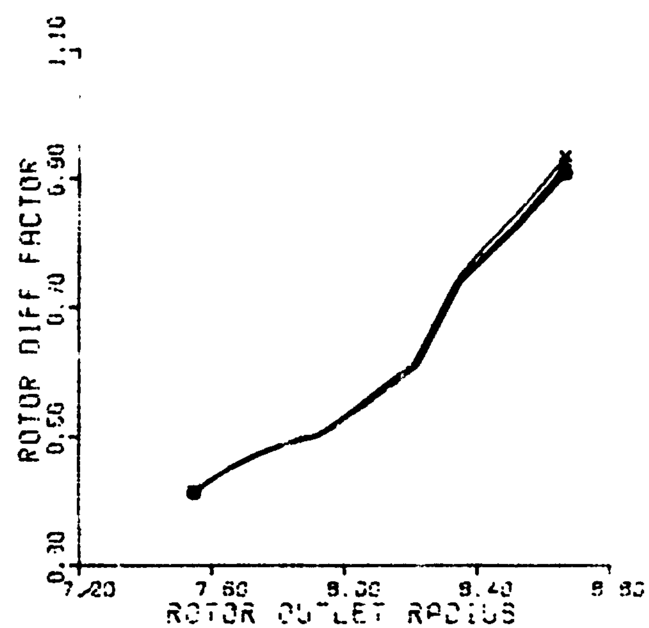


FIGURE 58. ROTOR INCIDENCE VS INLET RADIUS (85% SPEED)



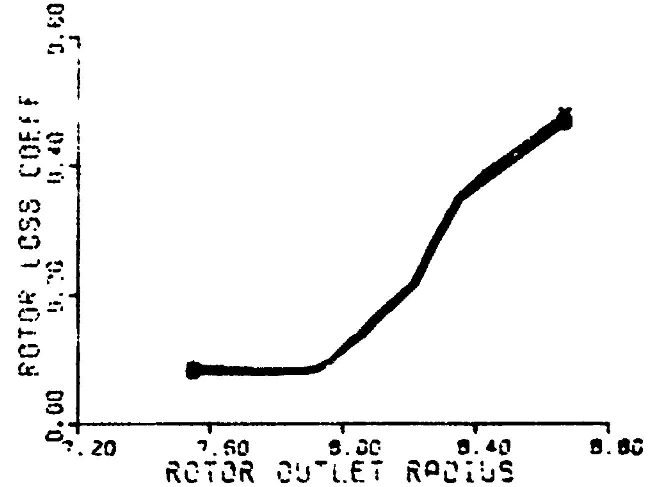


FIGURE 60. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (85% SPEED)

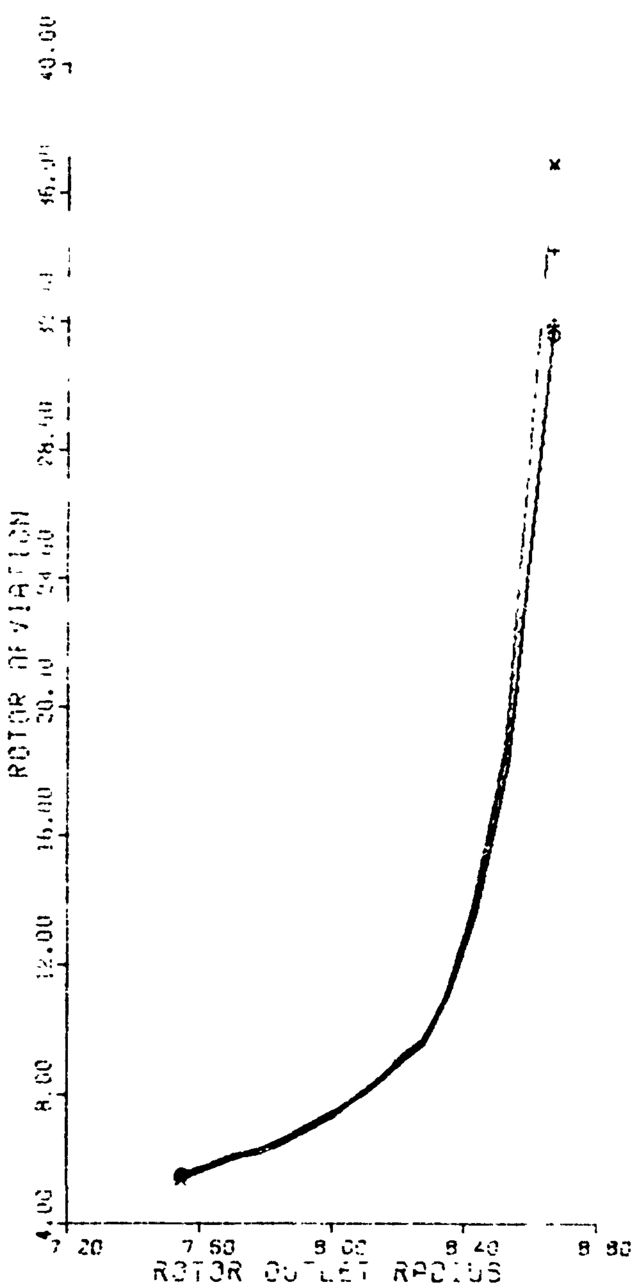


FIGURE 61. ROTOR DEVIATION VS OUTLET RADIUS (85% SPEED)

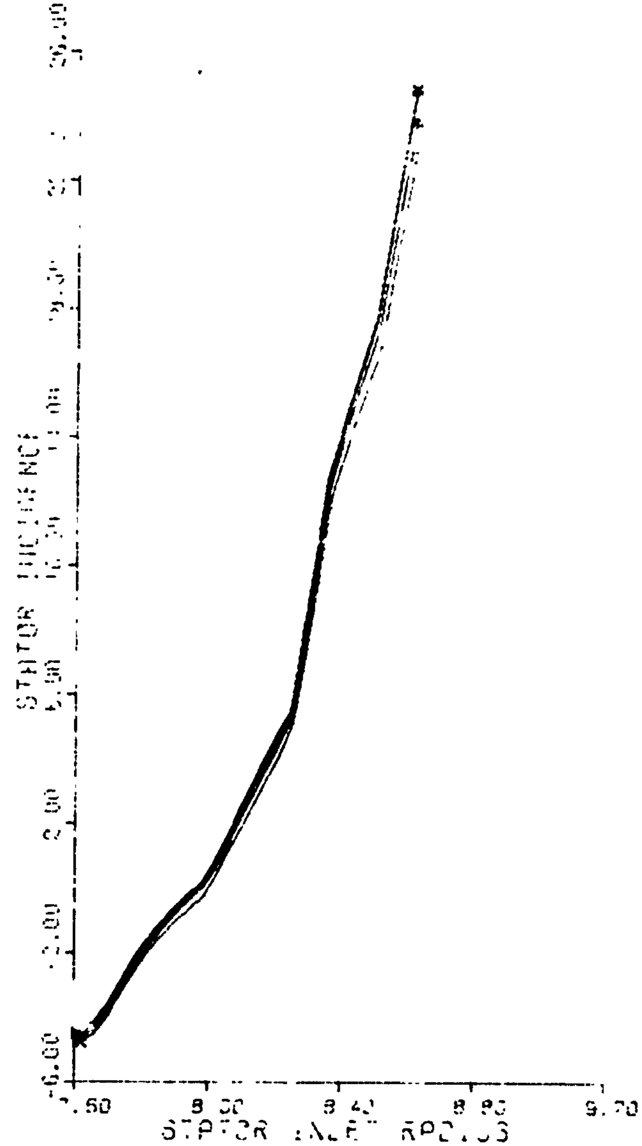


FIGURE 62. STATOR INCIDENCE VS INLET RADIUS (85% SPEED)

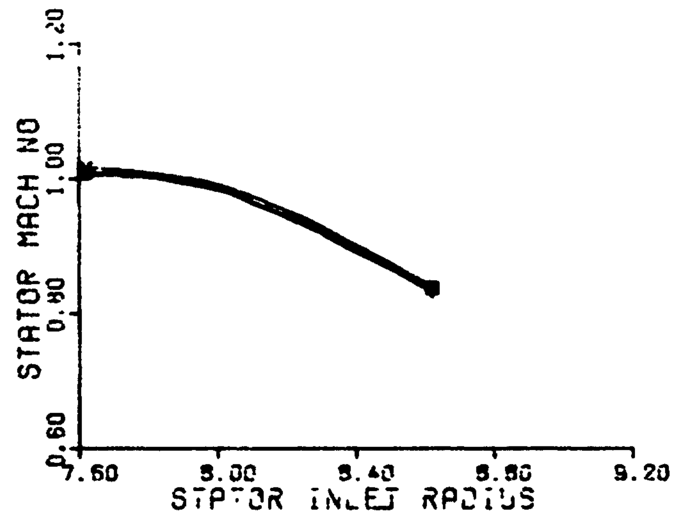


FIGURE 63. STATOR MACH NUMBER VS INLET RADIUS (85% SPEED)

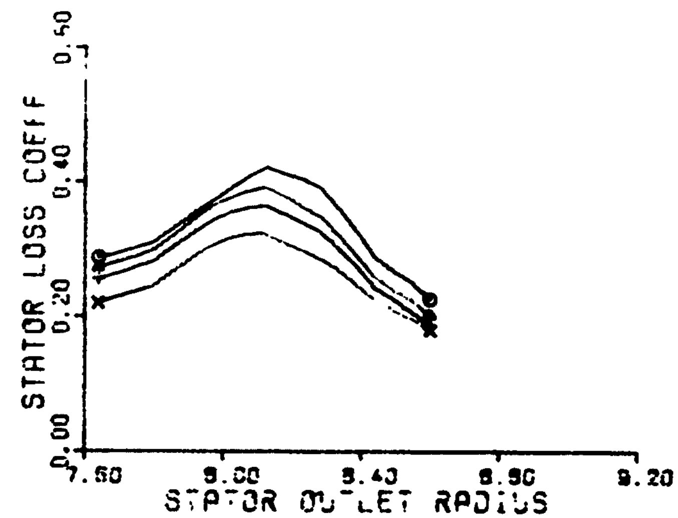


FIGURE 64. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (85% SPEED)

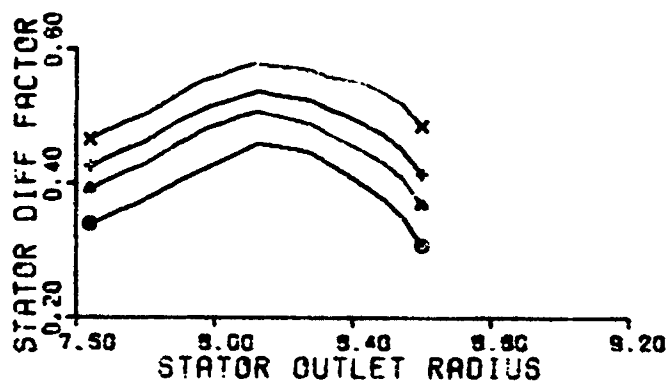


FIGURE 65. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (85% SPEED)

TABLE XI

IDENTIFICATION OF SYMBOLS
FOR 90%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301181515590	⦶
301181615790	⏚
301181715690	+
301181415290	×

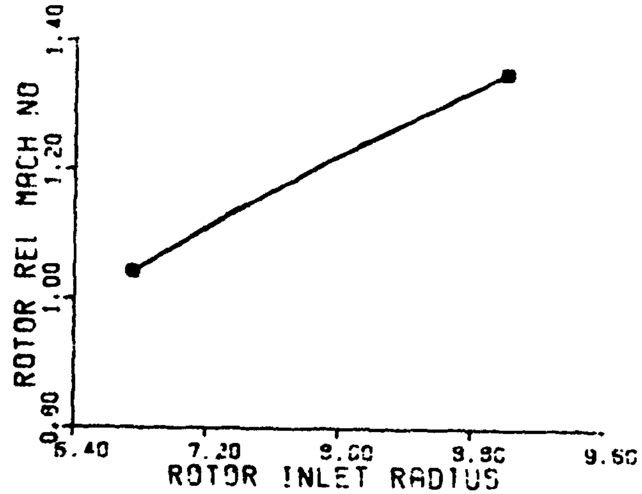


FIGURE 66. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (90% SPEED)

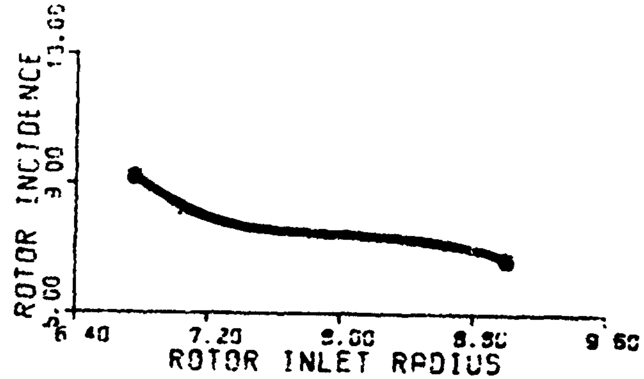


FIGURE 67. ROTOR INCIDENCE VS INLET RADIUS (90% SPEED)

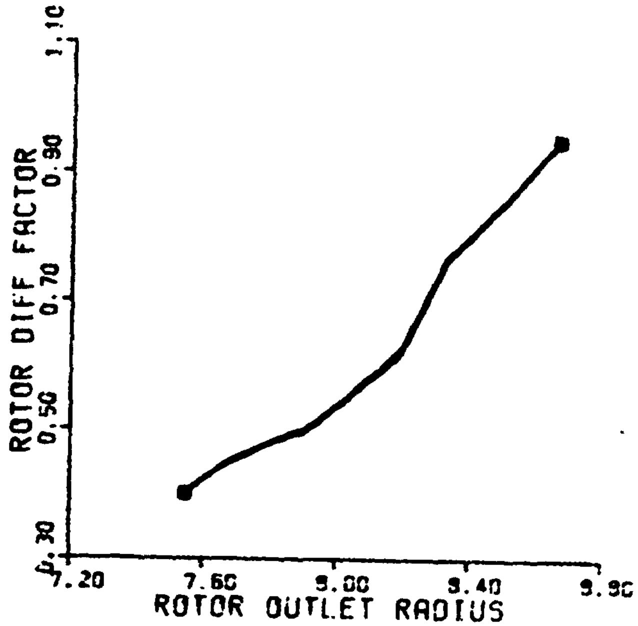


FIGURE 68. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (90% SPEED)

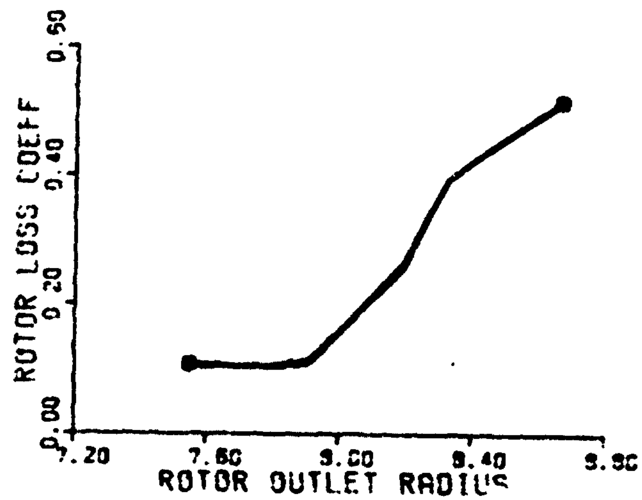


FIGURE 69. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (90% SPEED)

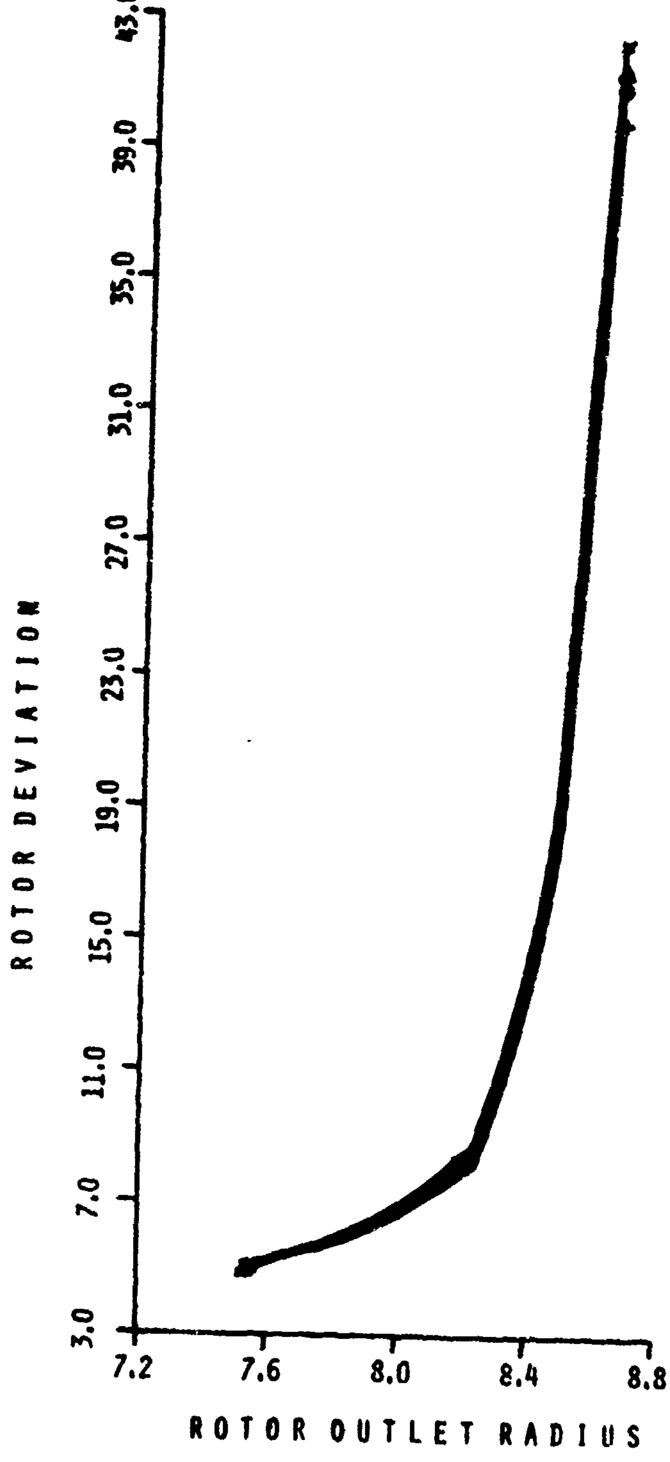


FIGURE 70. ROTOR DEVIATION VS OUTLET RADIUS (90% SPEED)

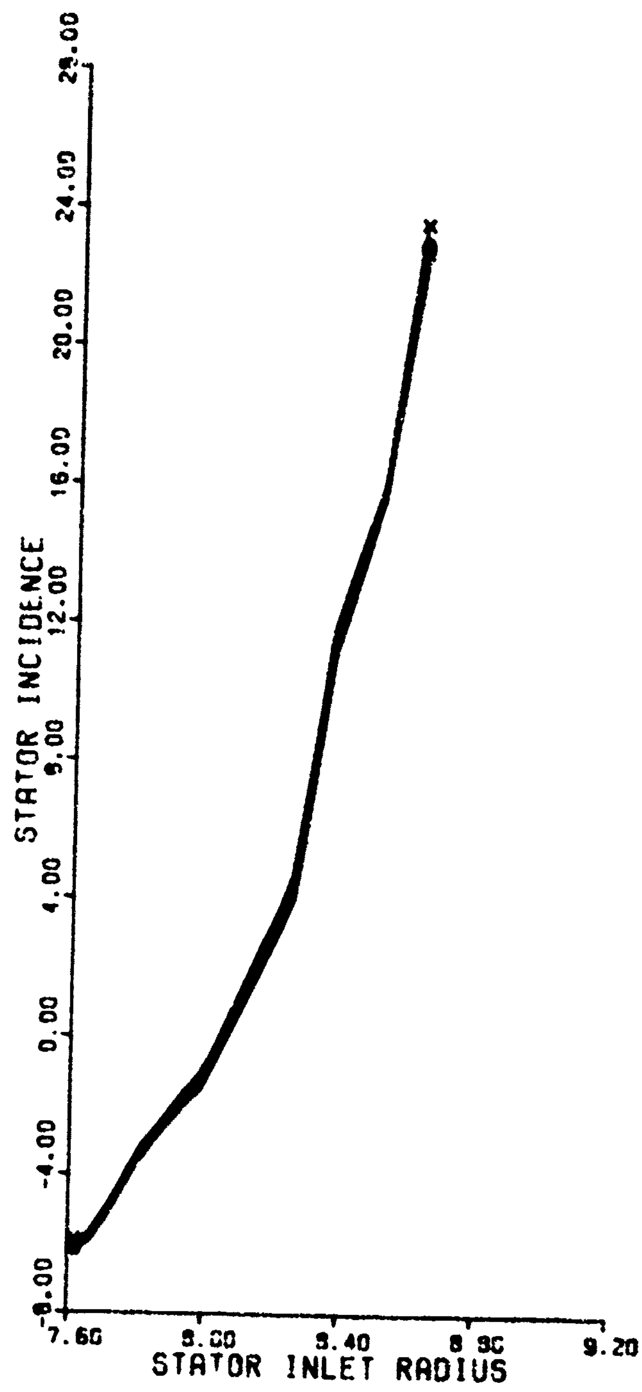


FIGURE 71. STATOR INCIDENCE VS INLET RADIUS (90% SPEED)

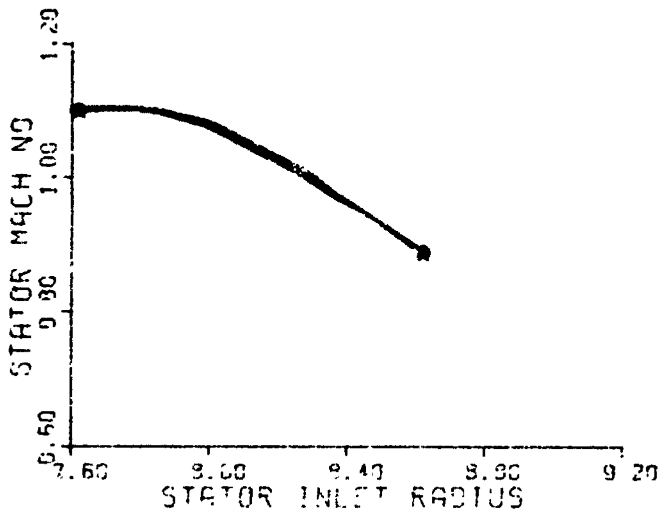


FIGURE 72. STATOR MACH NUMBER VS INLET RADIUS (90% SPEED)

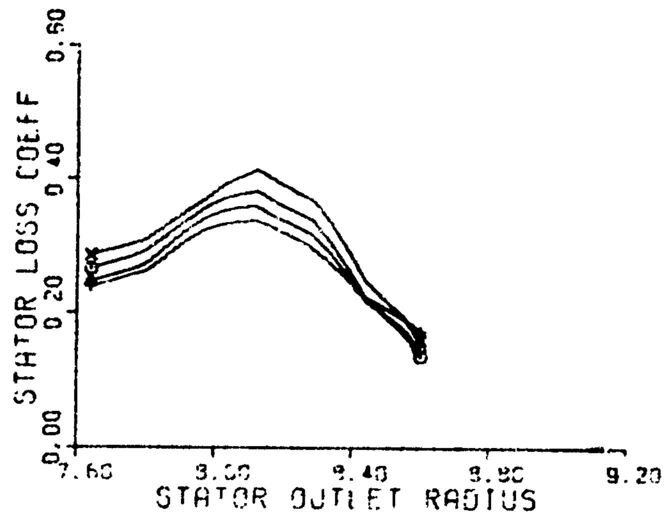


FIGURE 73. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (90% SPEED)

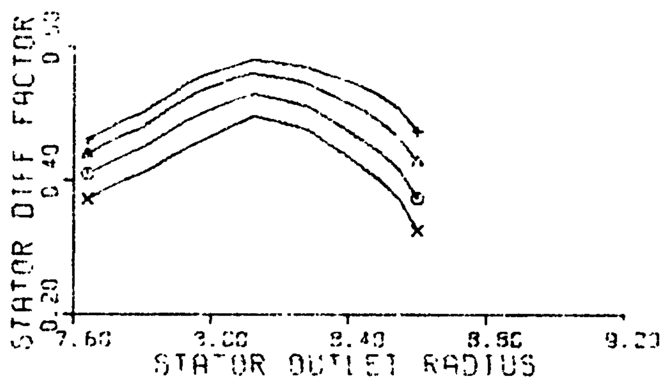


FIGURE 74. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (90% SPEED)

TABLE XII

IDENTIFICATION OF SYMBOLS
FOR 95%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301230615095	⊙
301230415395	▽
301230515695	+

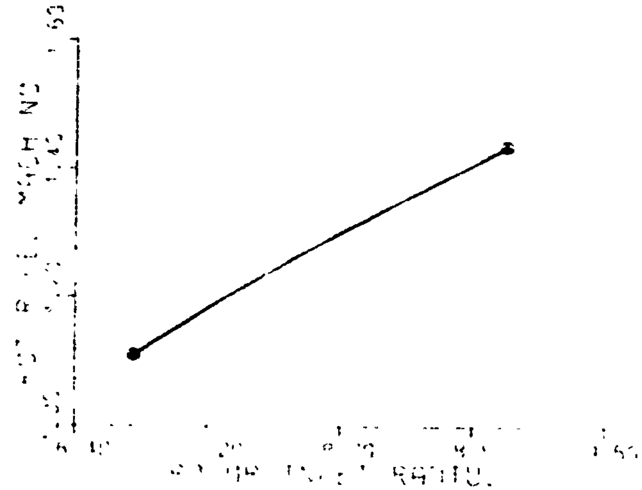


FIGURE 75. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (95% SPEED)

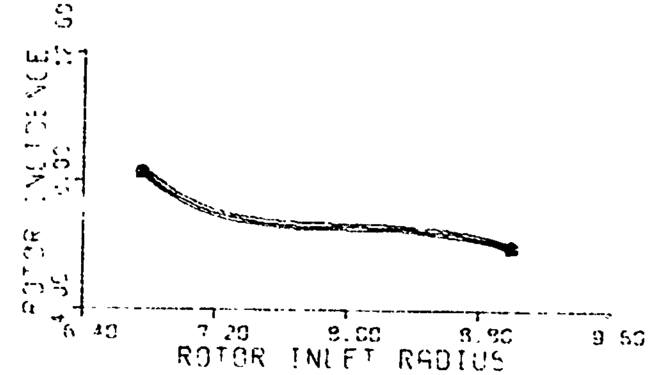


FIGURE 76. ROTOR INCIDENCE VS INLET RADIUS (95% SPEED)

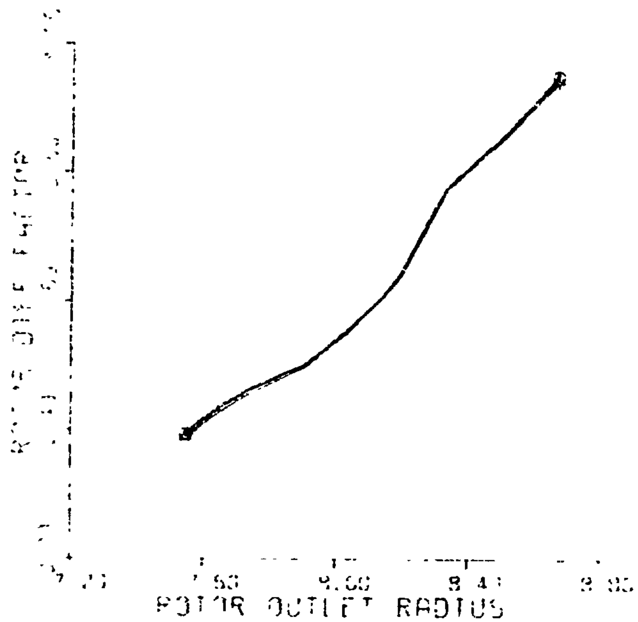


FIGURE 77. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (95% SPEED)

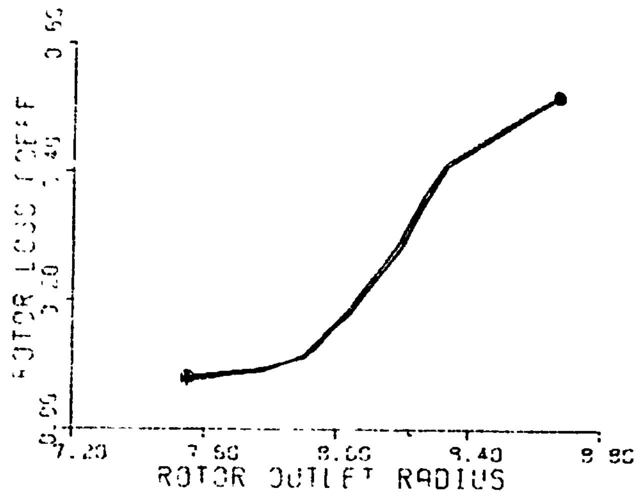


FIGURE 78. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (95% SPEED)

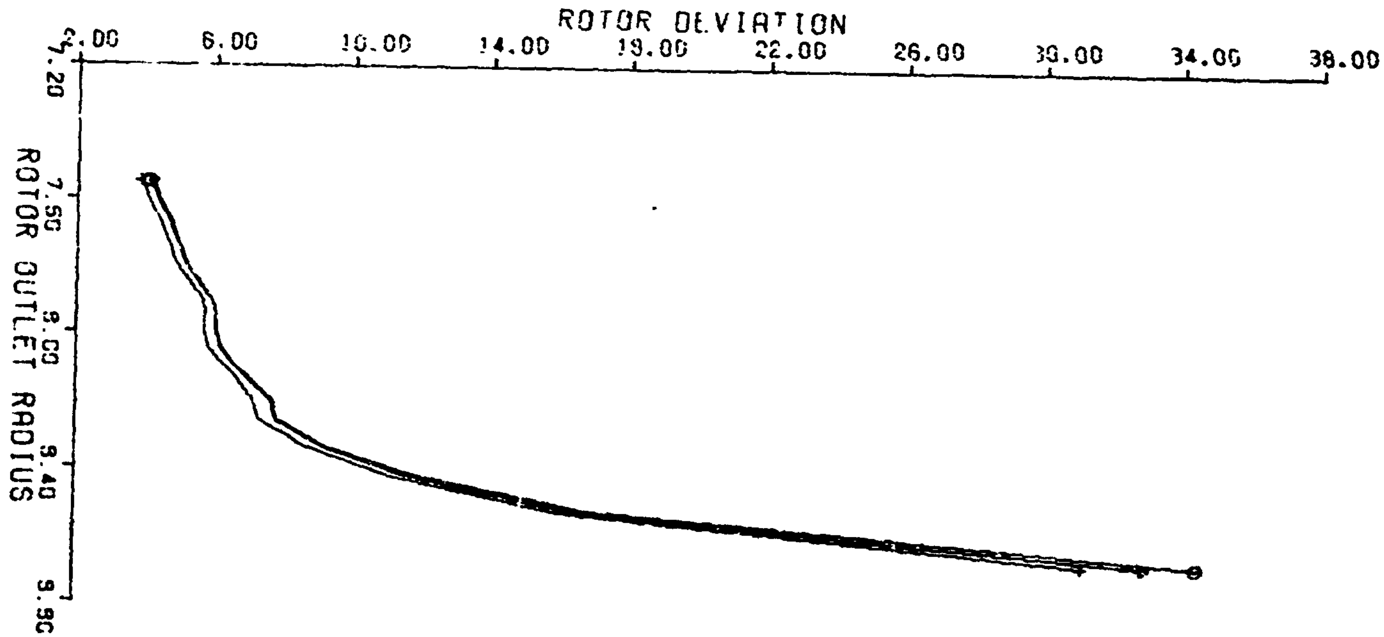


FIGURE 79. ROTOR DEVIATION VS OUTLET RADIUS
(95% SPEED)

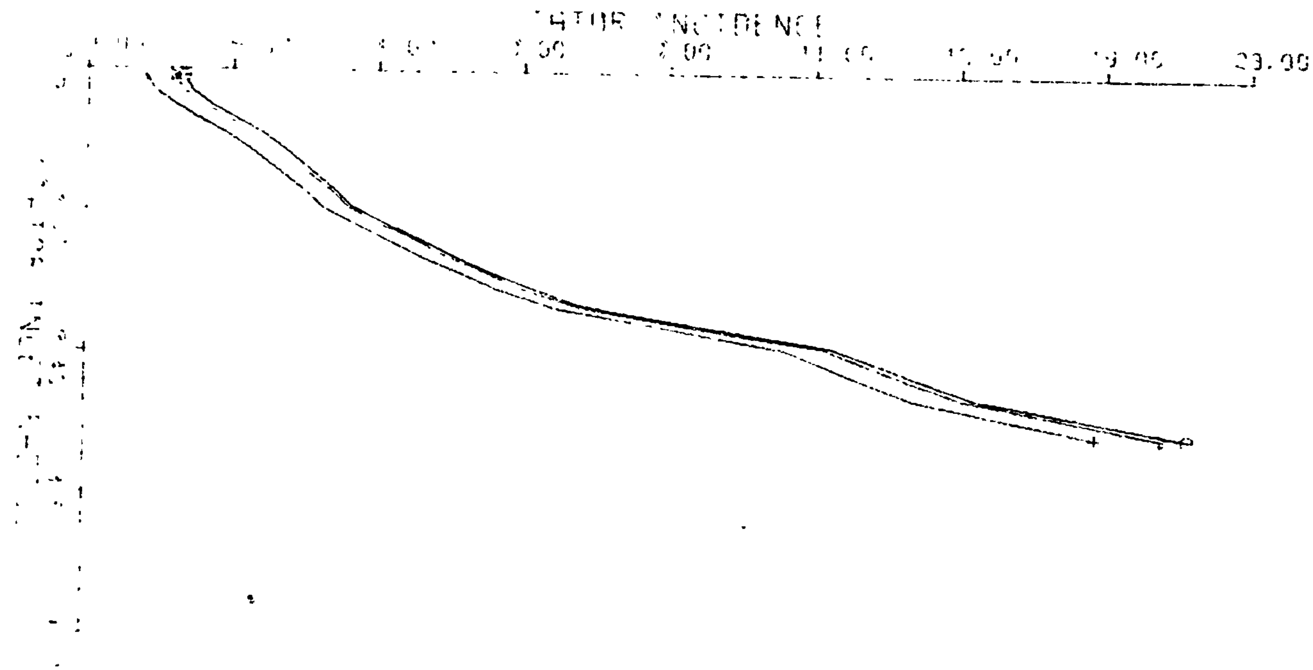


FIGURE 80. STATOR INCIDENCE VS INLET RADIUS
(95% SPEED)

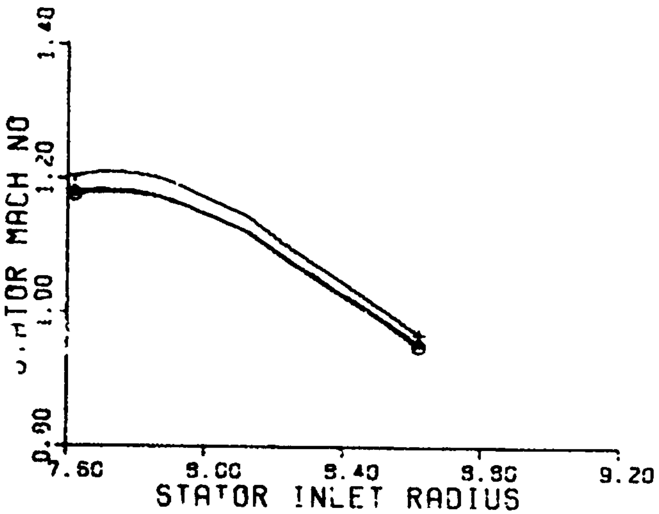


FIGURE 81. STATOR MACH NUMBER VS INLET RADIUS (95% SPEED)

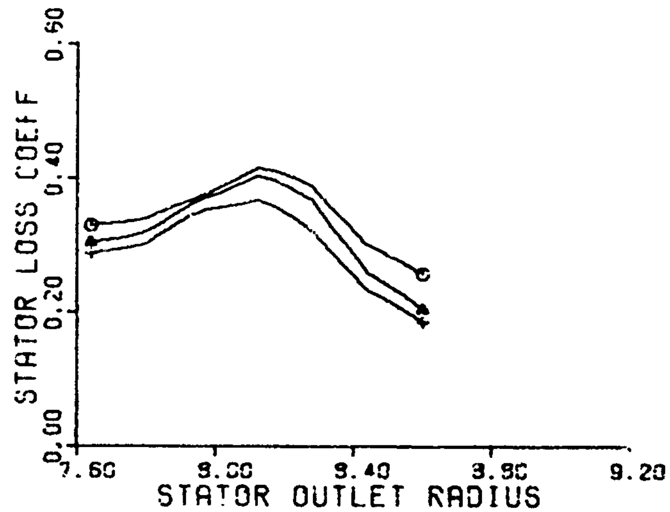


FIGURE 82. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (95% SPEED)

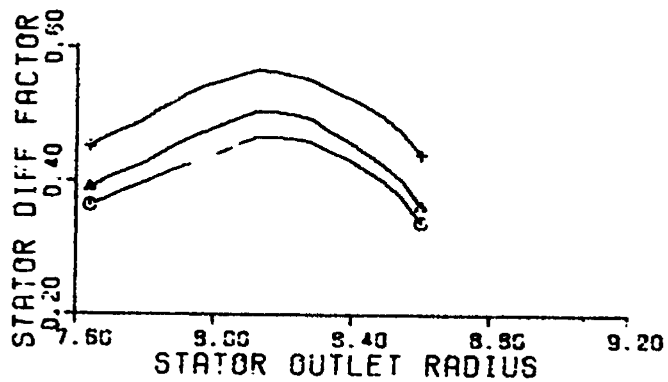


FIGURE 83. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (95% SPEED)

TABLE XIII

IDENTIFICATION OF SYMBOLS
FOR 100%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301231515600	⦶
301231615700	▽
301231315200	+
301231415400	×

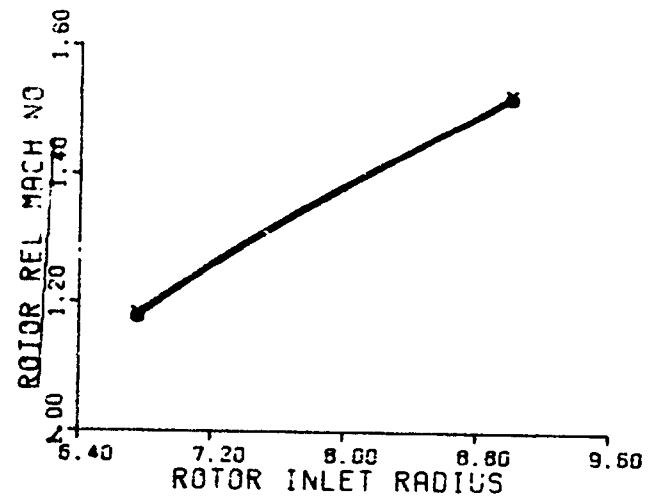


FIGURE 84. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (100% SPEED)

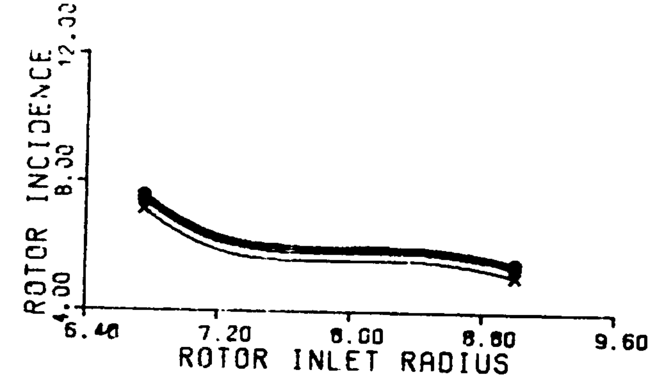


FIGURE 85. ROTOR INCIDENCE VS INLET RADIUS (100% SPEED)

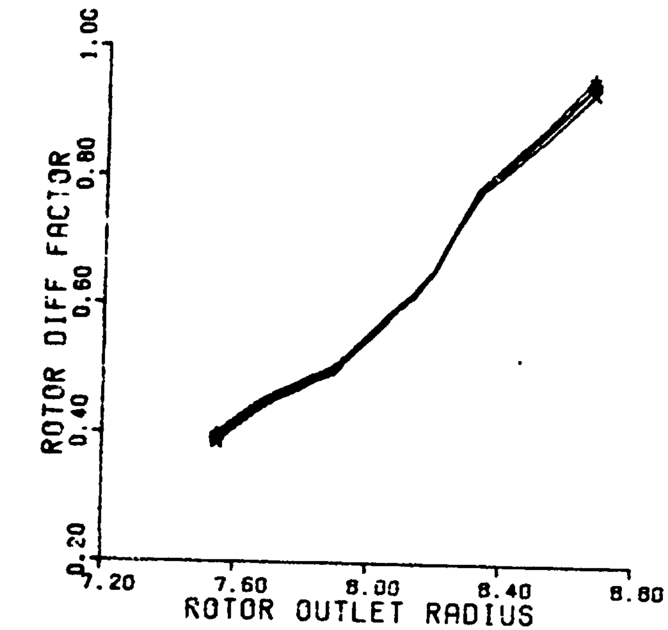


FIGURE 86. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (100% SPEED)

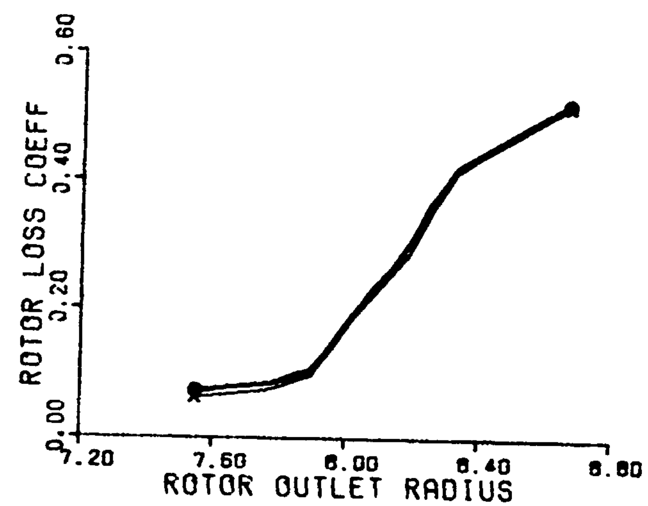


FIGURE 87. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (100% SPEED)

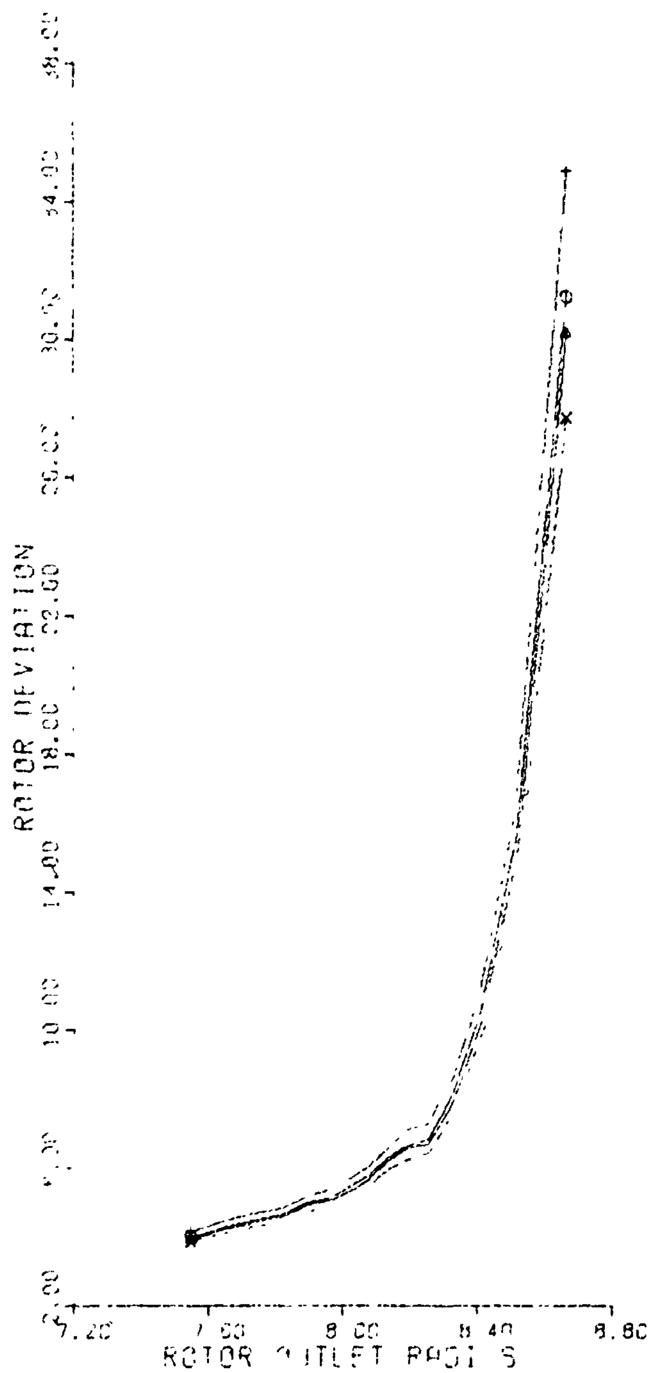


FIGURE 88. ROTOR DEVIATION VS OUTLET RADIUS
(100% SPEED)

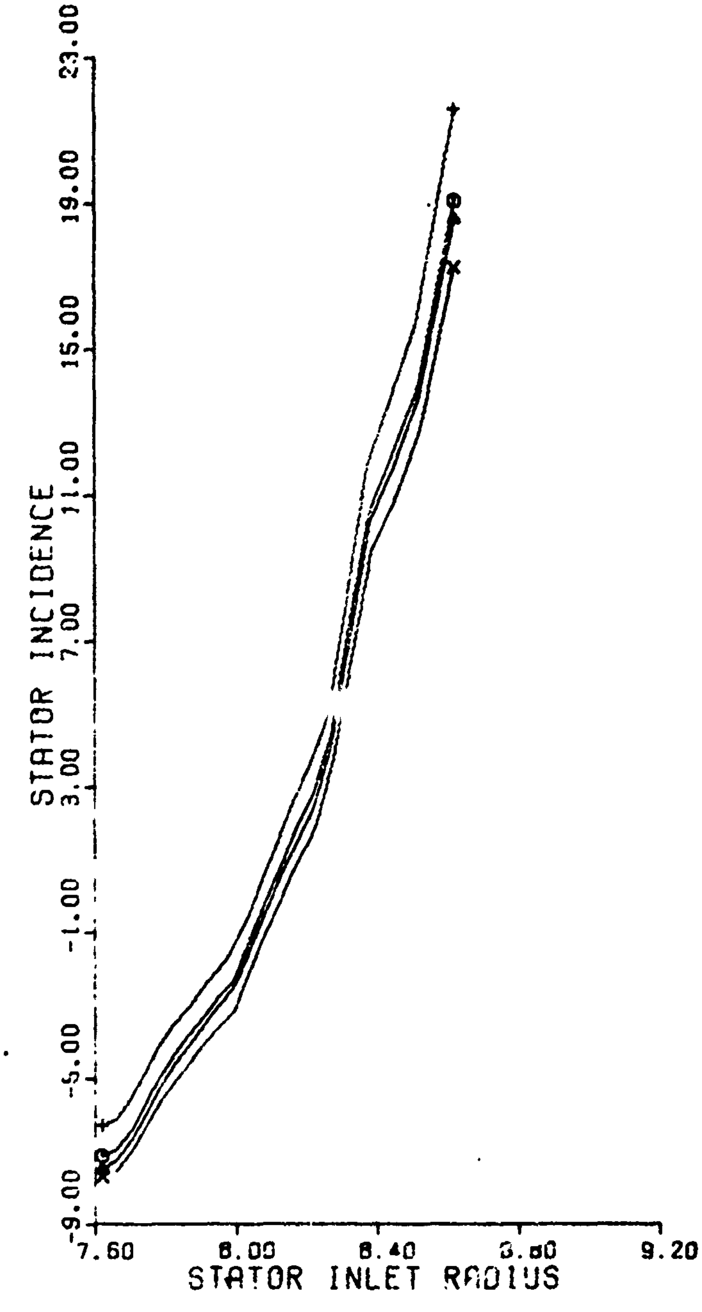


FIGURE 89. STATOR INCIDENCE VS INLET RADIUS (100% SPEED)

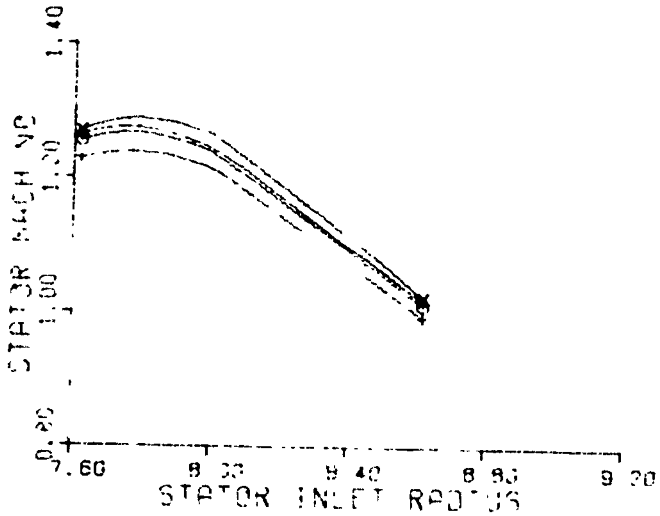


FIGURE 90. STATOR MACH NUMBER VS INLET RADIUS (100% SPEED)

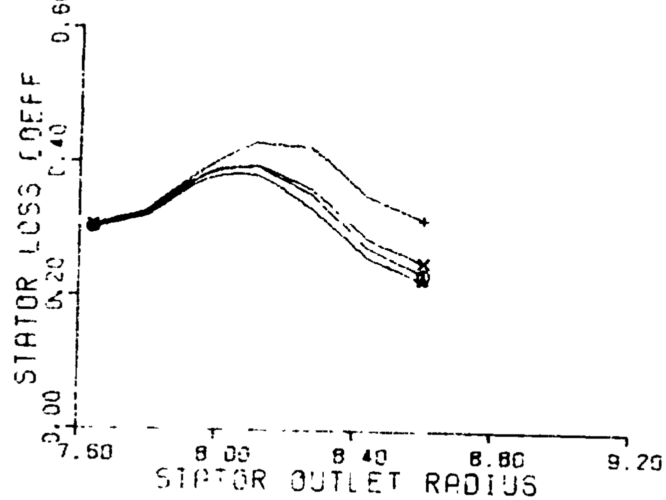


FIGURE 91. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (100% SPEED)

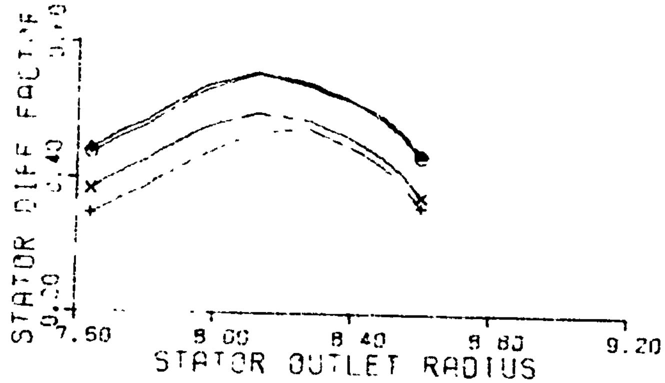


FIGURE 92. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (100% SPEED)

TABLE XIV

IDENTIFICATION OF SYMBOLS FOR 102%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301240815302	⦶
301240915602	▽

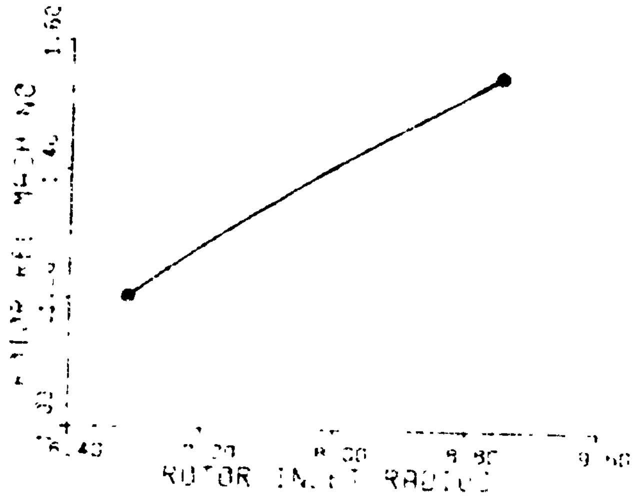


FIGURE 93. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (102% SPEED)

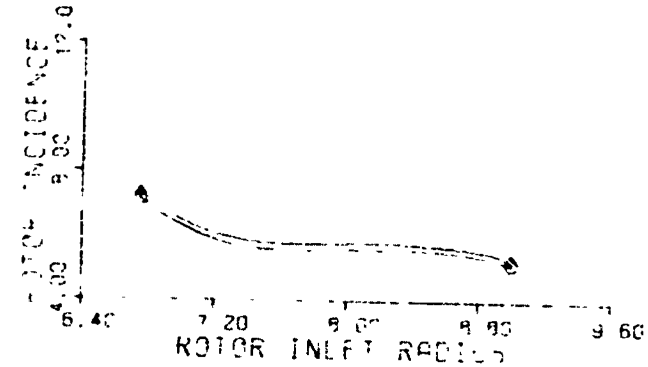


FIGURE 94. ROTOR INCIDENCE VS INLET RADIUS (102% SPEED)

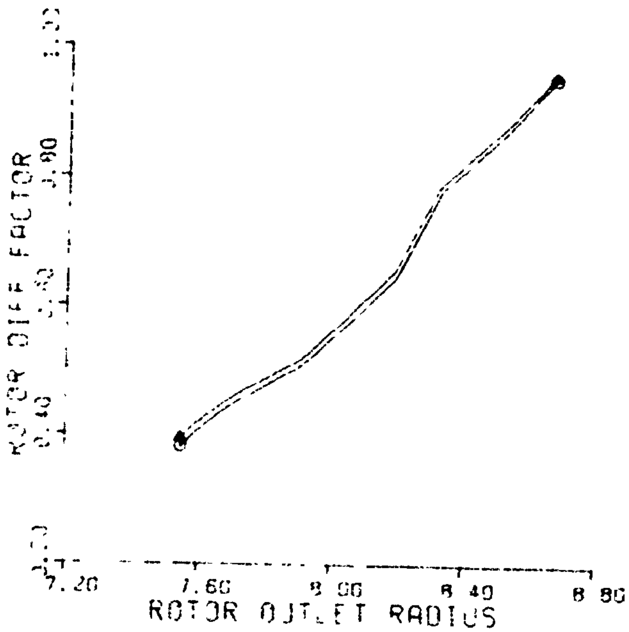


FIGURE 95. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (102% SPEED)

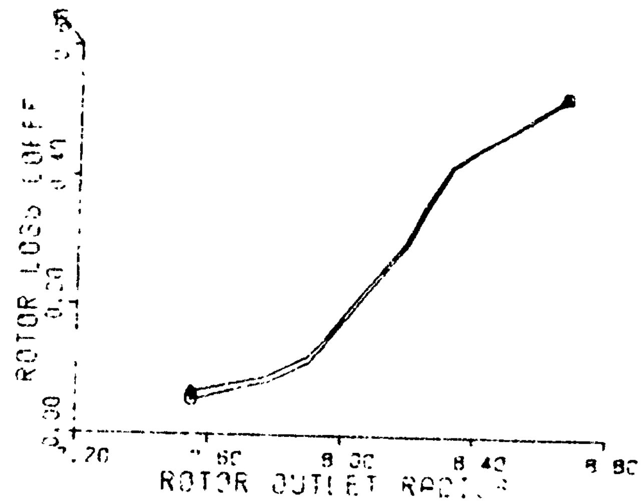


FIGURE 96. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (102% SPEED)

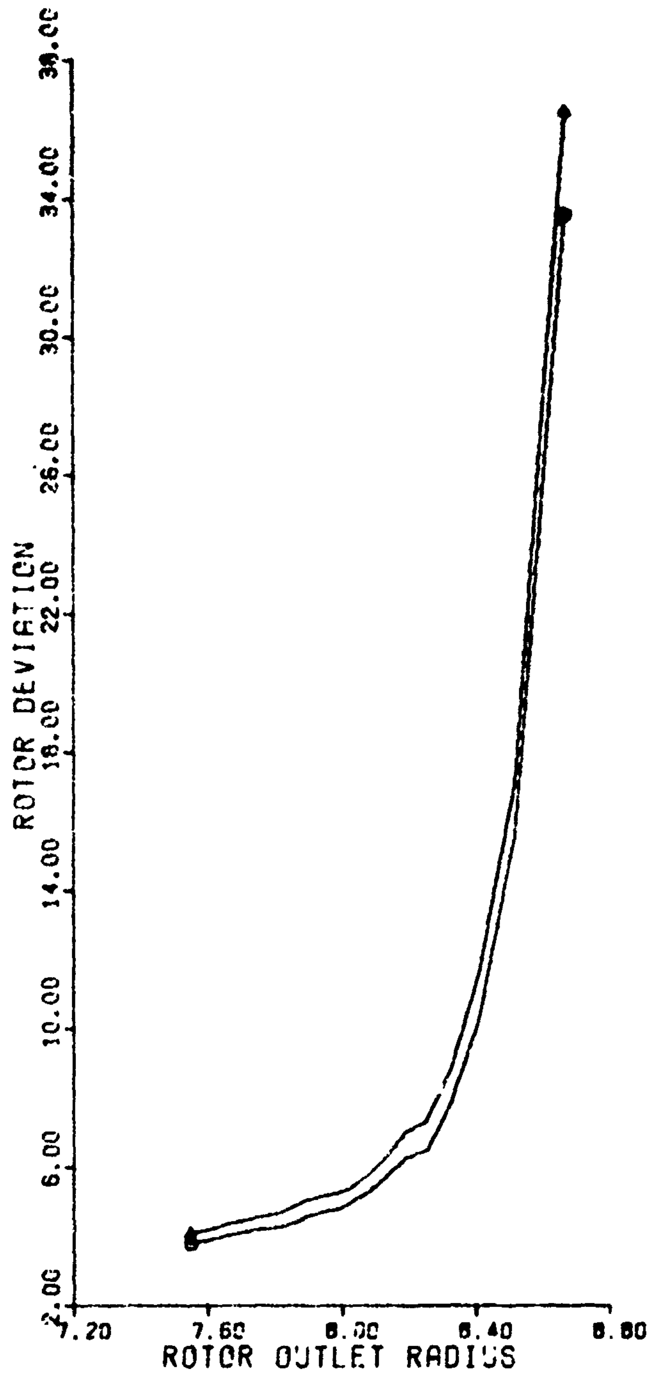


FIGURE 97. ROTOR DEVIATION VS OUTLET RADIUS (102% SPEED)

FIGURE 98. STATOR INCIDENCE VS INLET RADIUS
(102% SPEED)

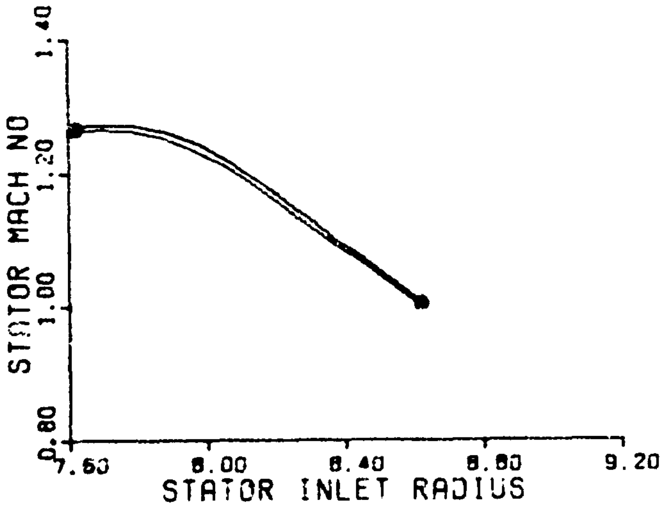


FIGURE 99. STATOR MACH NUMBER VS INLET RADIUS (102% SPEED)

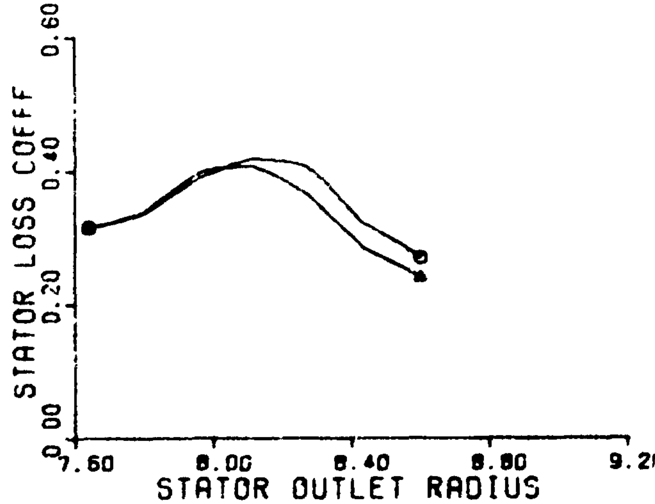


FIGURE 100. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (102% SPEED)

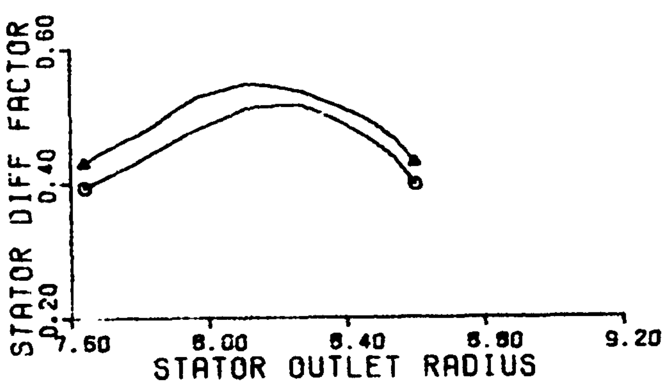


FIGURE 101. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (102% SPEED)

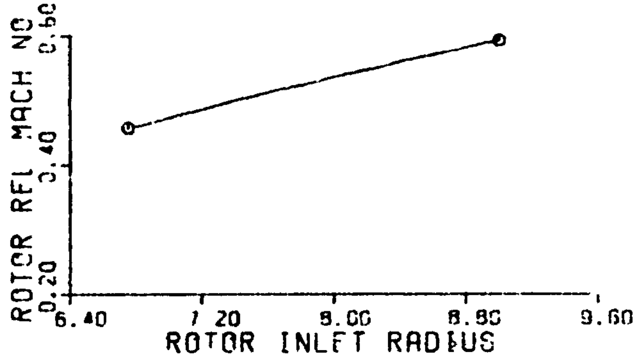


FIGURE 102. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

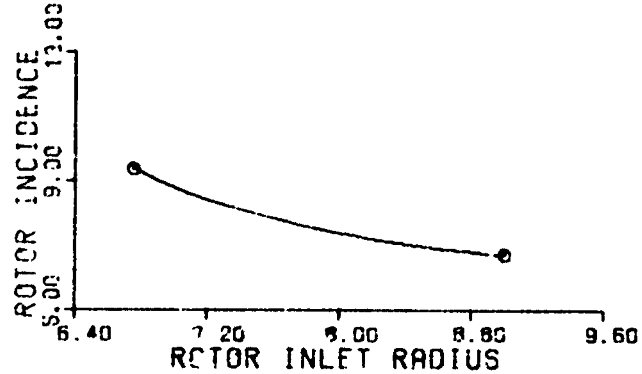


FIGURE 103. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

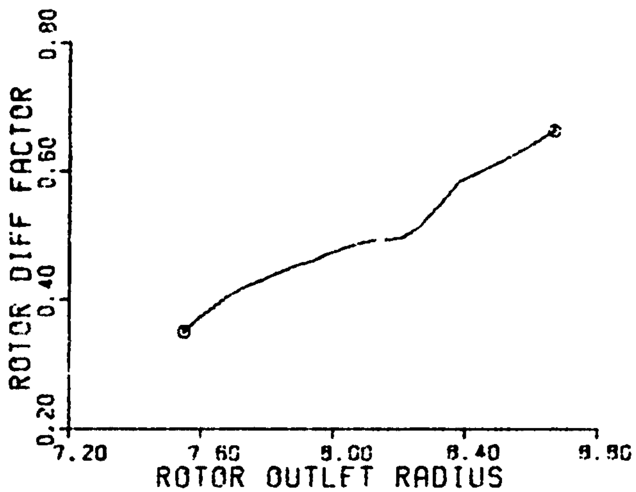


FIGURE 104. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

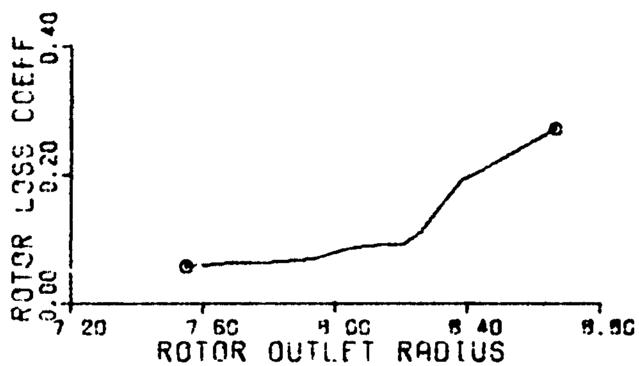


FIGURE 105. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

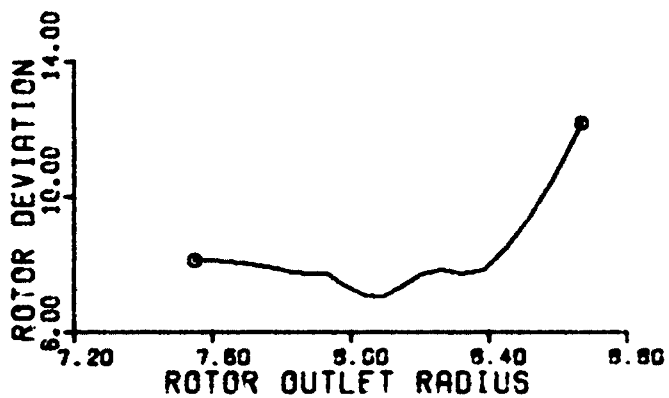


FIGURE 106. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

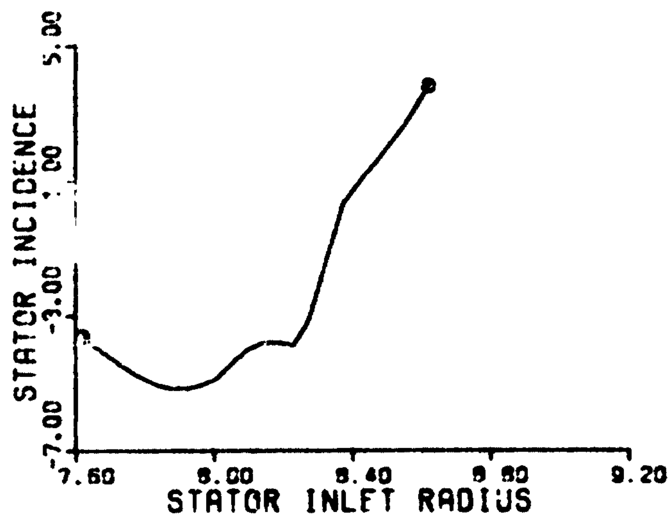


FIGURE 107. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

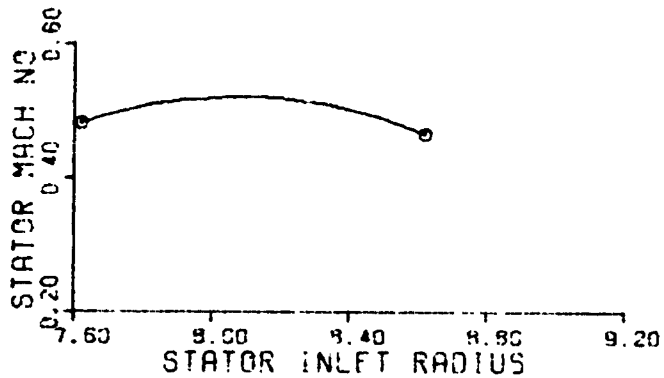


FIGURE 108. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

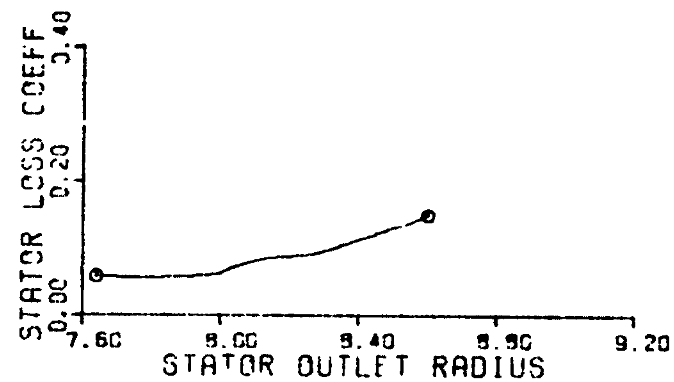


FIGURE 109. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

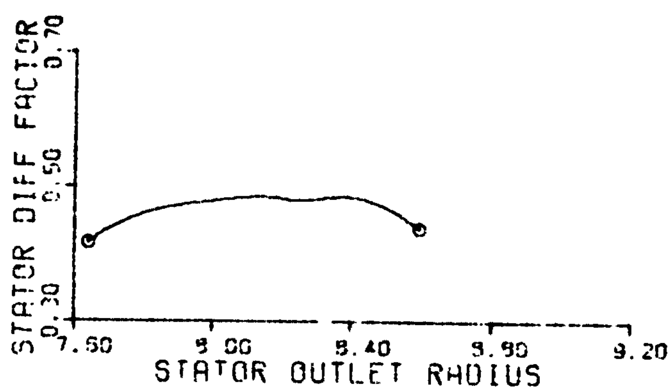


FIGURE 110. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

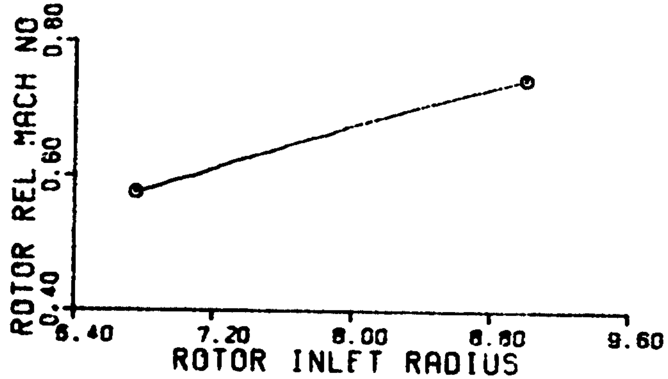


FIGURE 111. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN BLADE ANALYSIS, 50% SPEED)

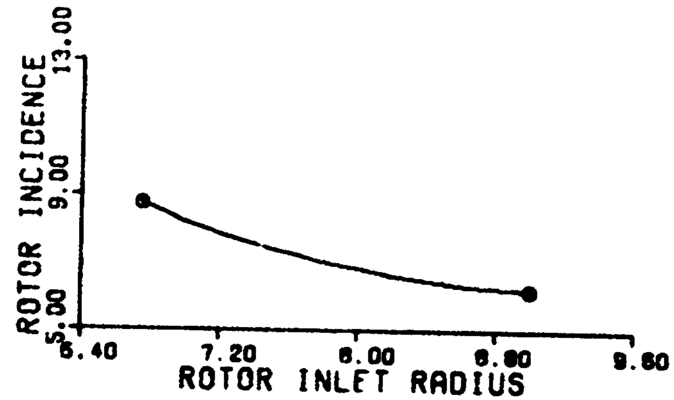


FIGURE 112. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

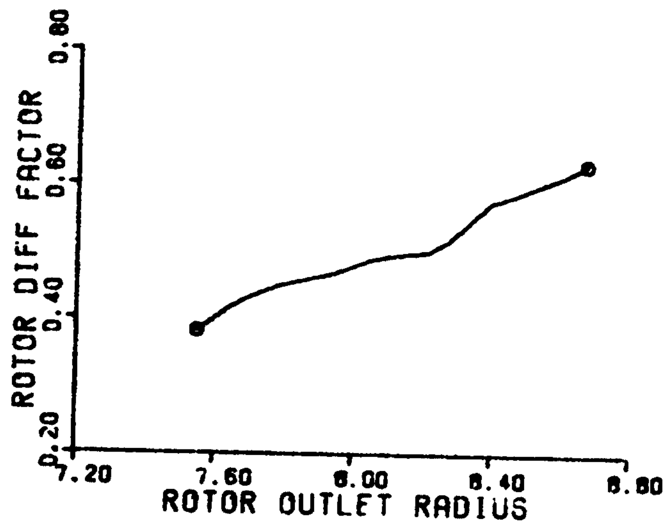


FIGURE 113. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

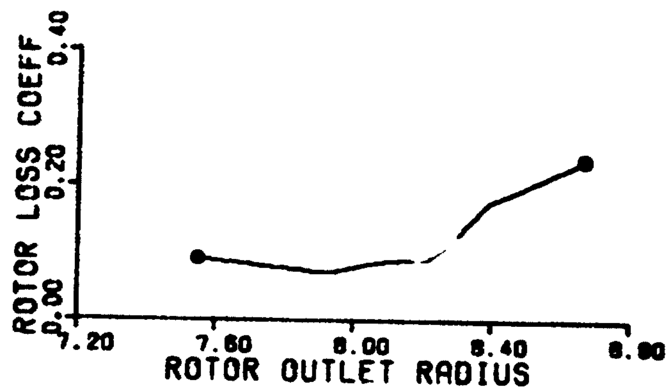


FIGURE 114. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

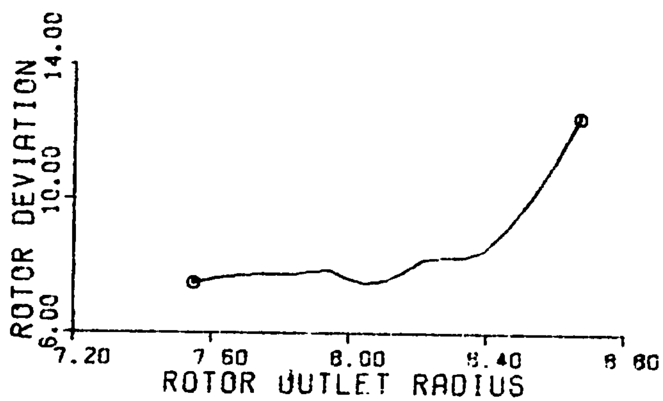


FIGURE 115. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

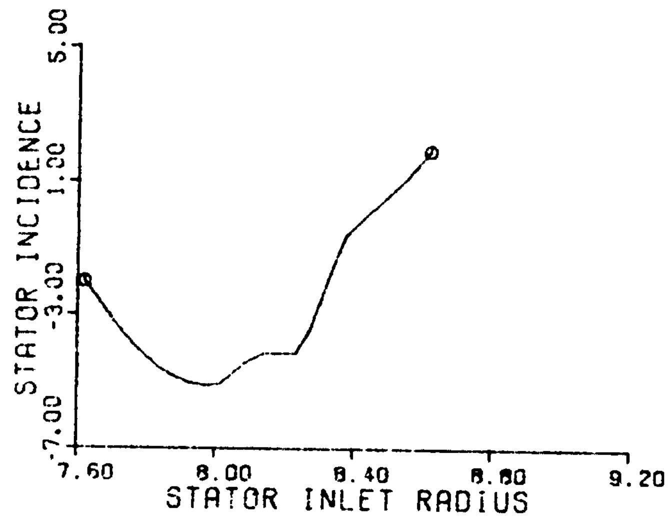


FIGURE 116. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

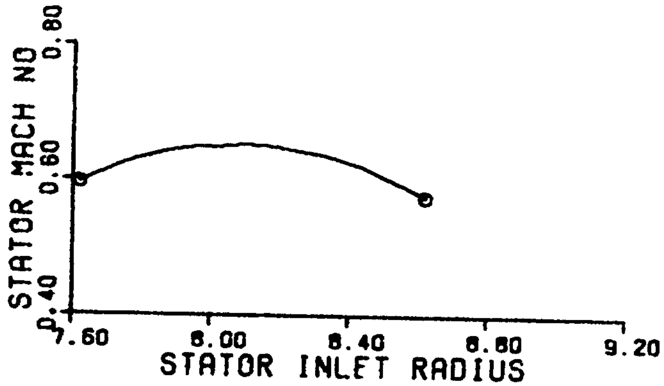


FIGURE 117. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

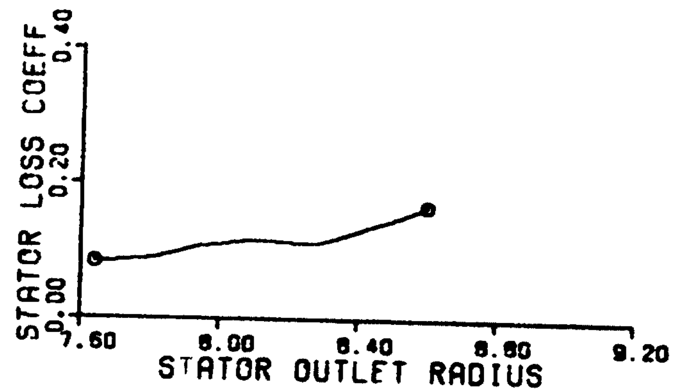


FIGURE 118. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

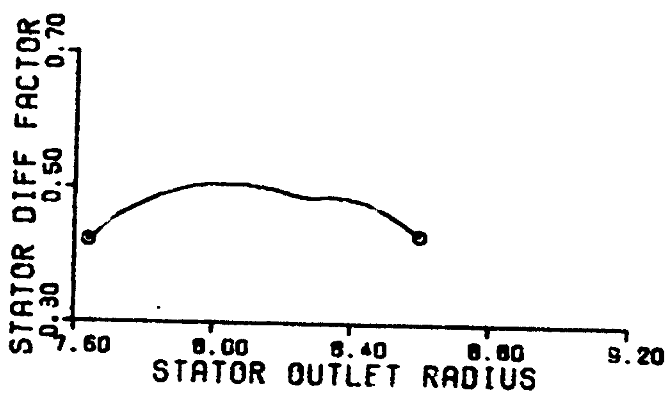


FIGURE 119. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

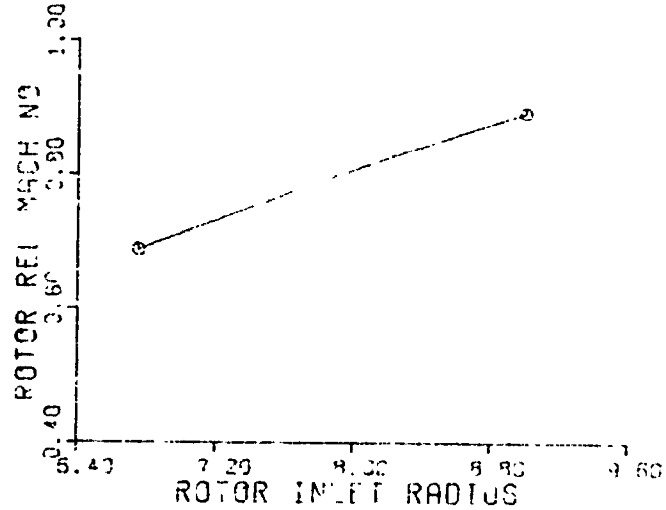


FIGURE 120. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

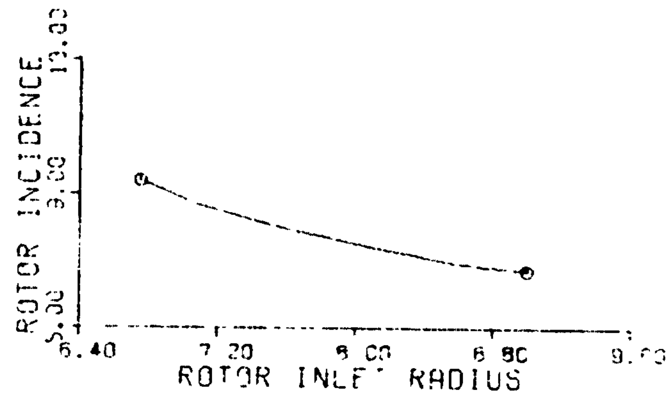


FIGURE 121. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

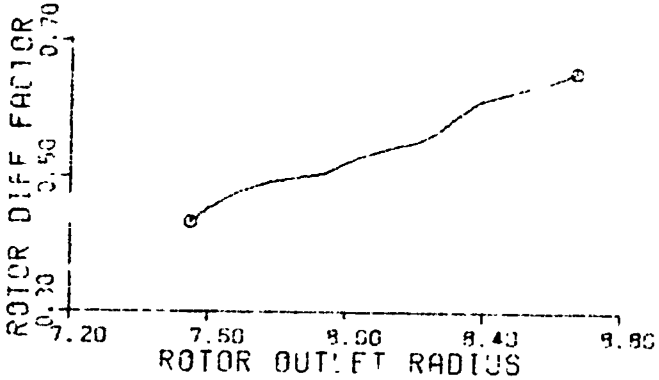


FIGURE 122. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

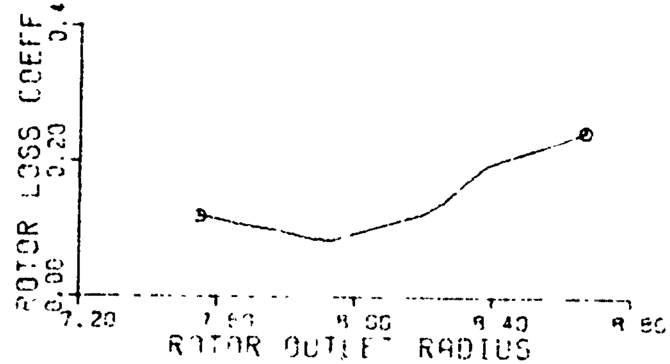


FIGURE 123. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

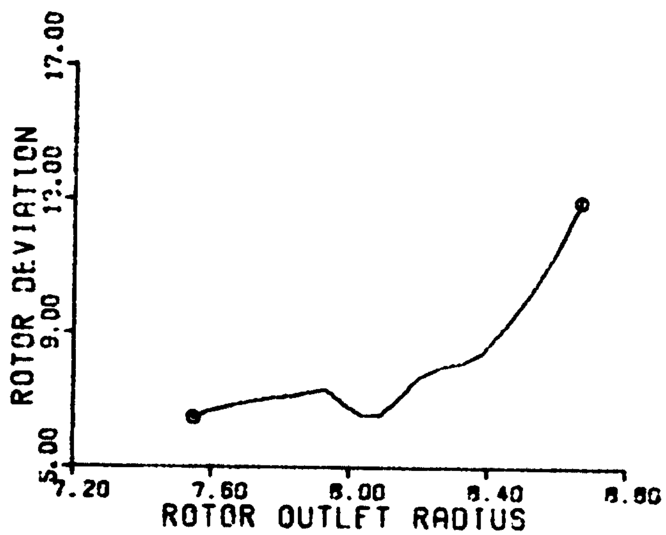


FIGURE 124. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

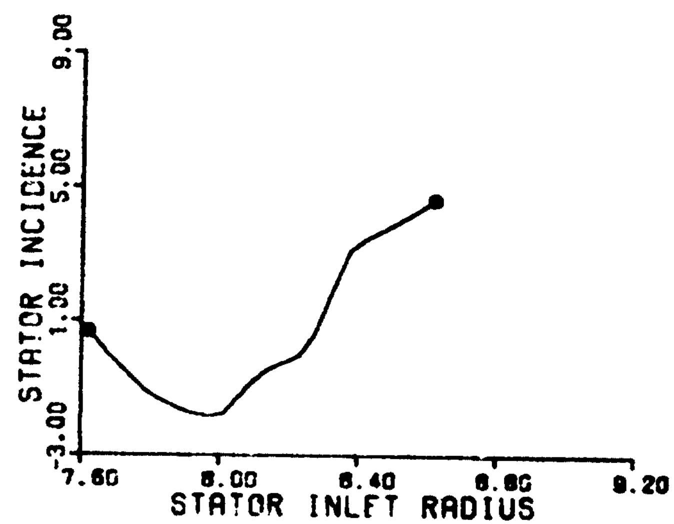


FIGURE 125. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

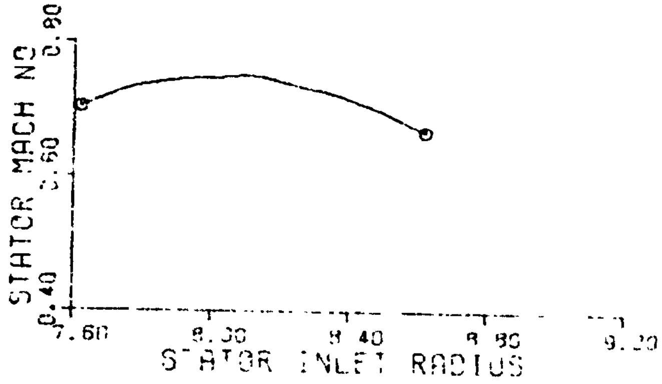


FIGURE 126. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

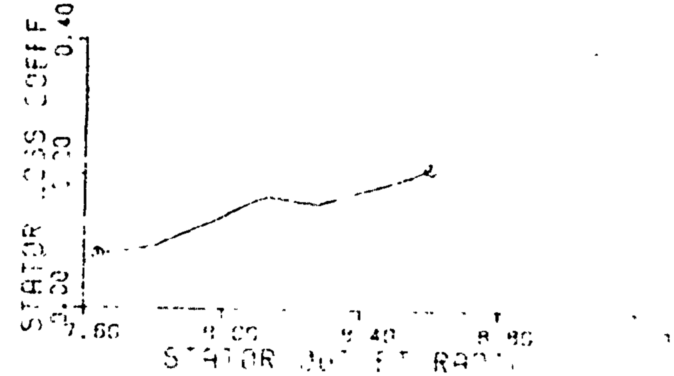


FIGURE 127. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

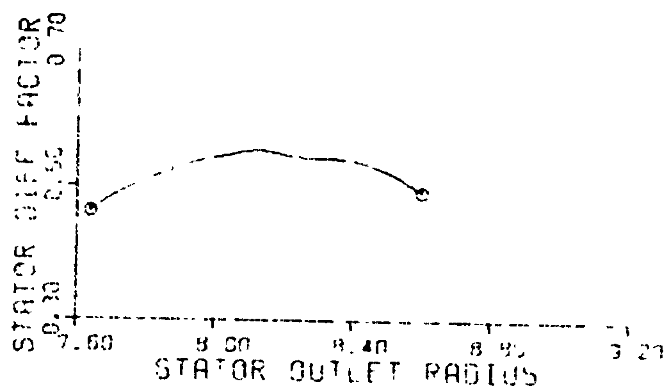


FIGURE 128. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

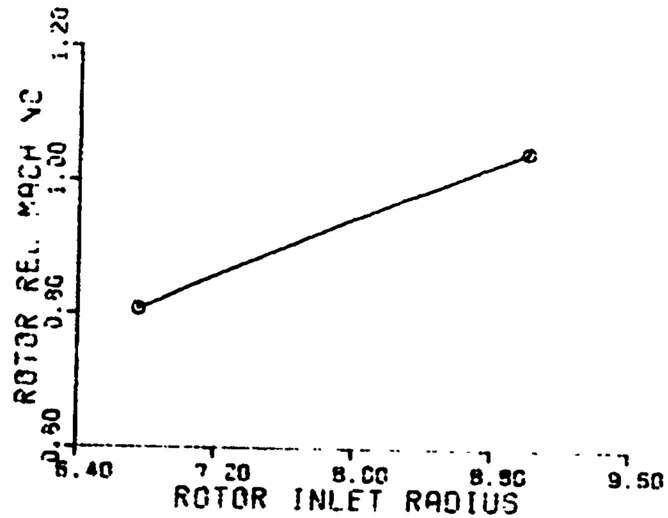


FIGURE 129. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

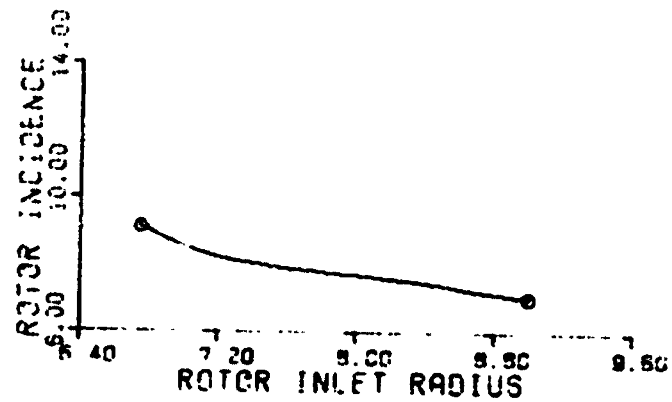


FIGURE 130. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

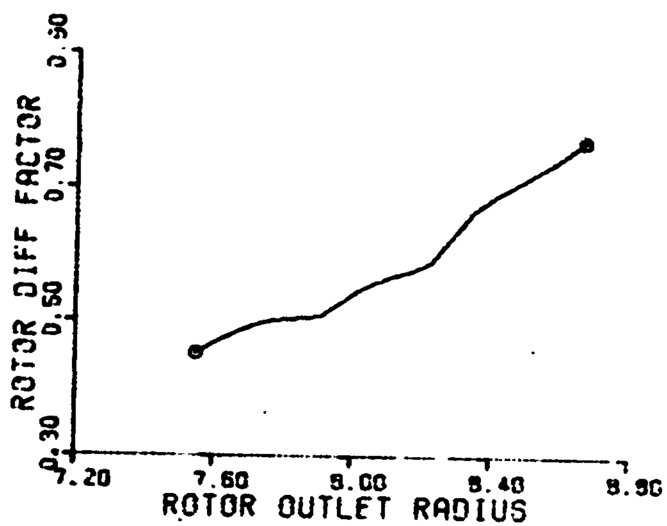


FIGURE 131. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

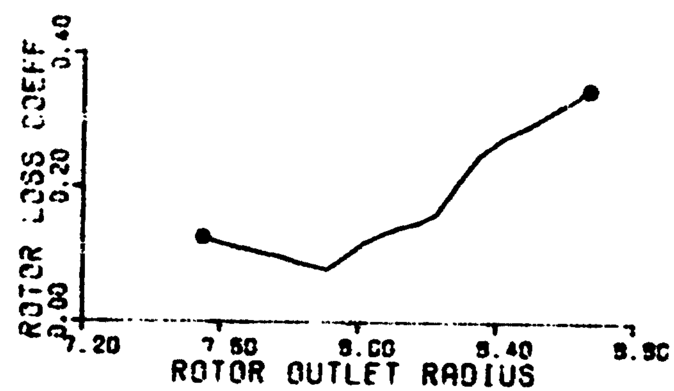


FIGURE 132. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

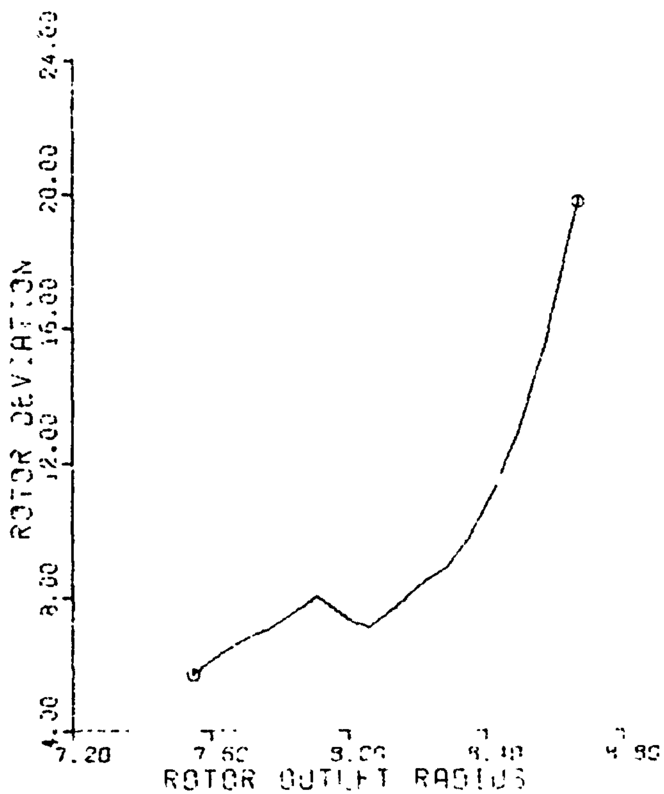


FIGURE 133. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

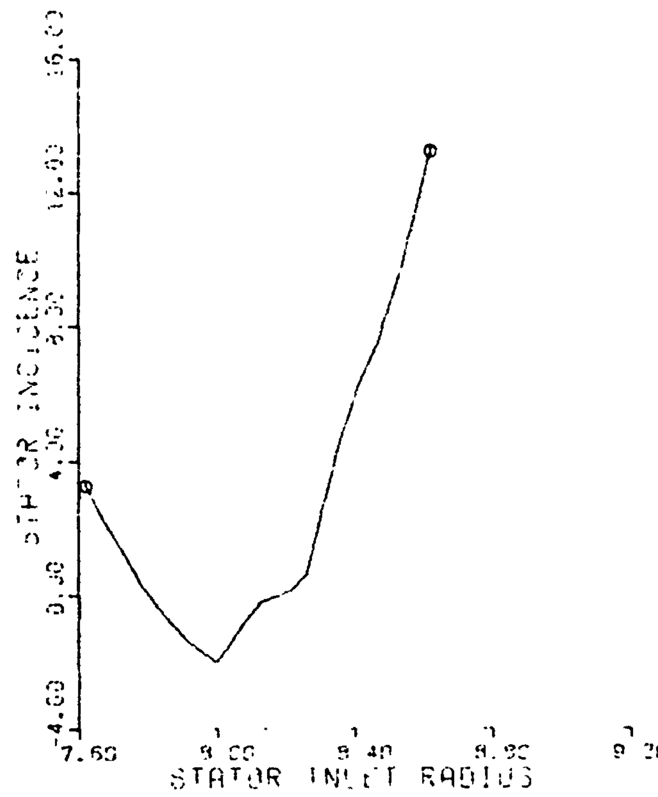


FIGURE 134. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

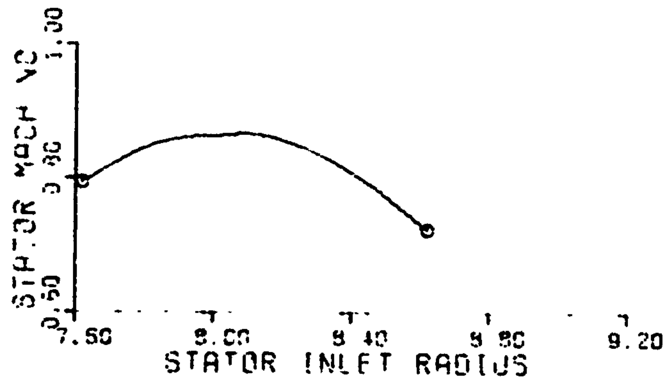


FIGURE 135. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

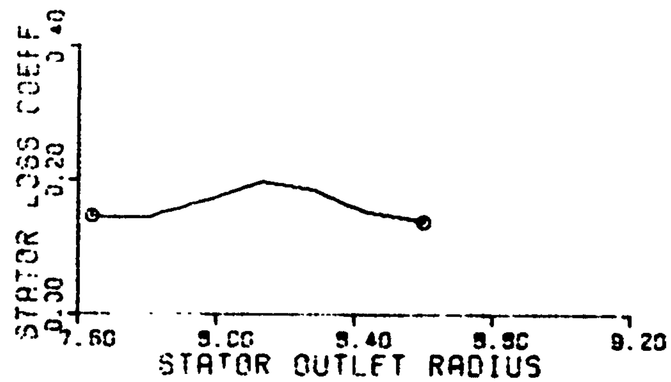


FIGURE 136. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

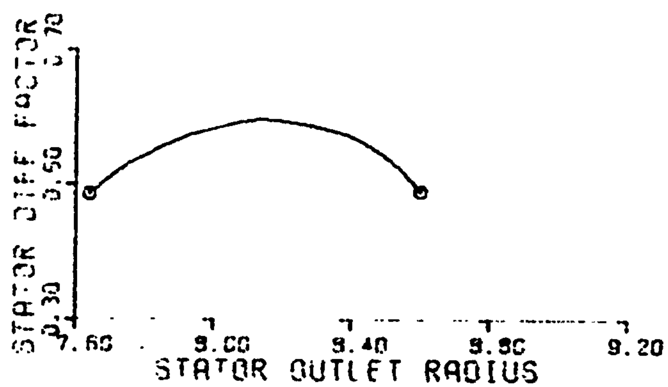


FIGURE 137. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

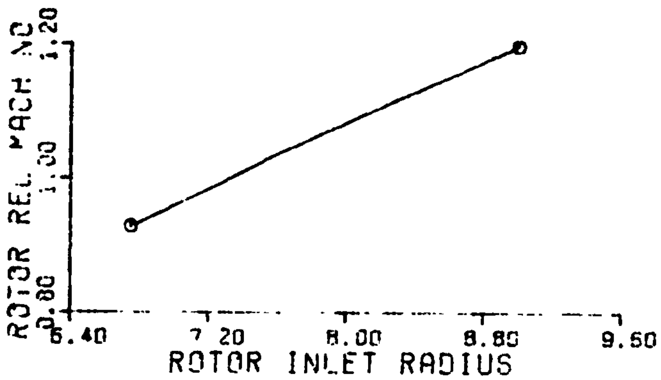


FIGURE 138. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

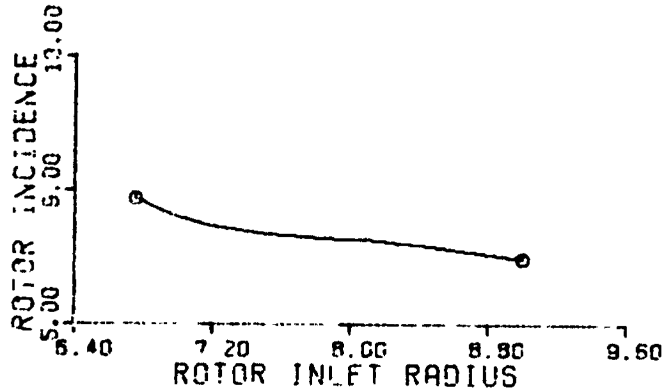


FIGURE 139. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

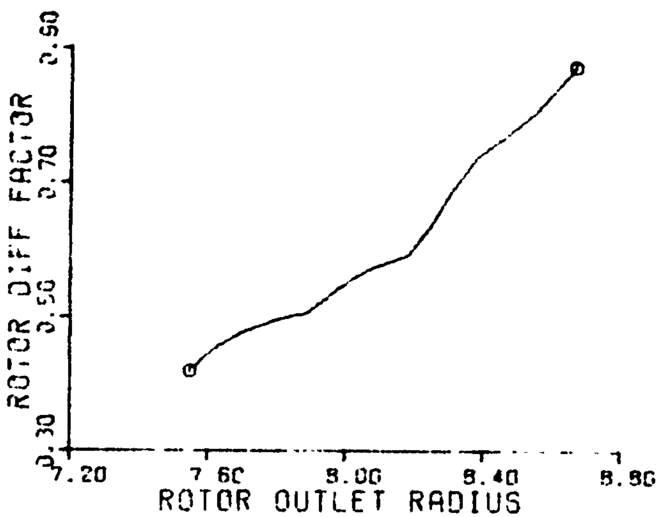


FIGURE 140. ROTOR DIFFUSION FACTOR VS CUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

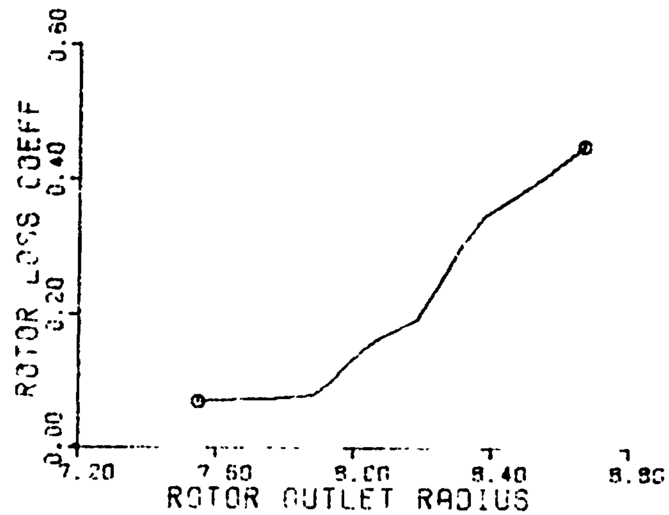


FIGURE 141. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

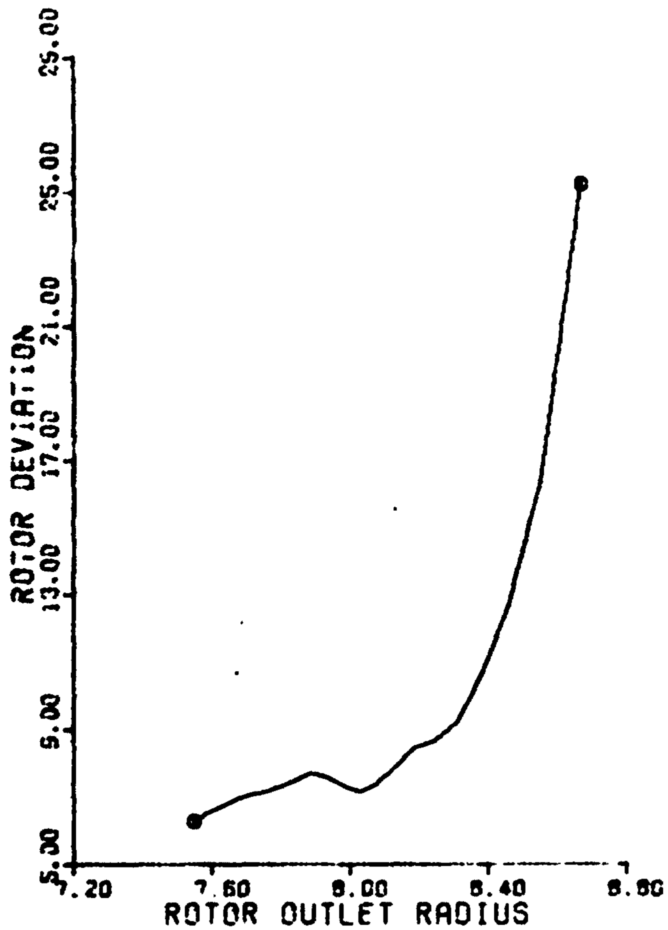


FIGURE 142. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

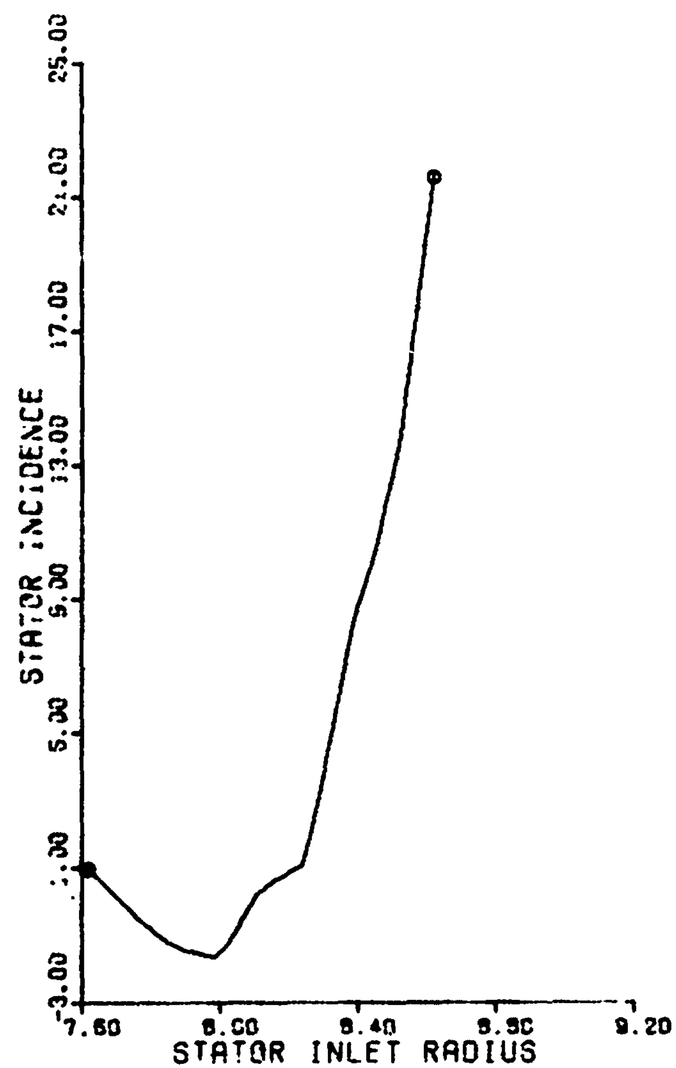


FIGURE 143. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

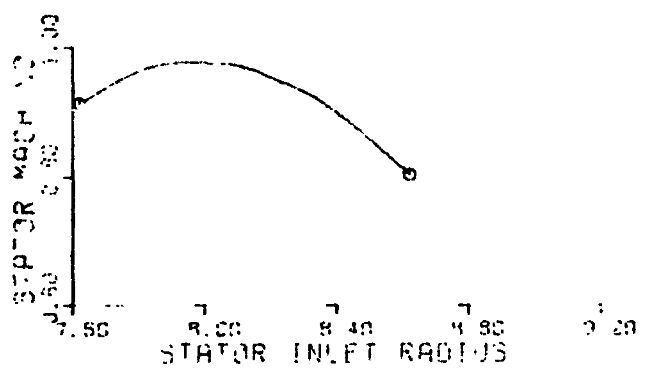


FIGURE 144. STATOR MACH NUMBER VS INLET RADIUS
(WITHIN-BLADE ANALYSIS, 80% SPEED)

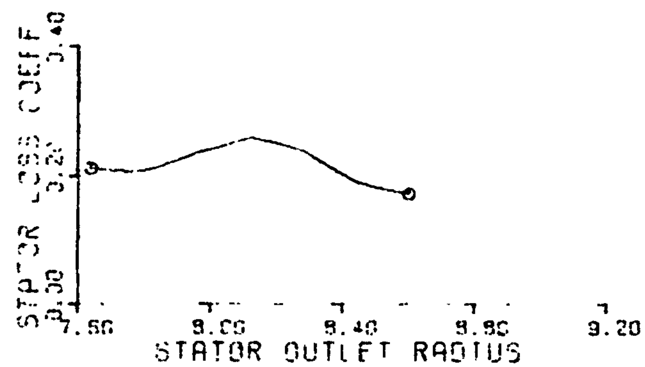


FIGURE 145. STATOR LOSS COEFFICIENT VS OUTLET RADIUS
(WITHIN-BLADE ANALYSIS, 80% SPEED)

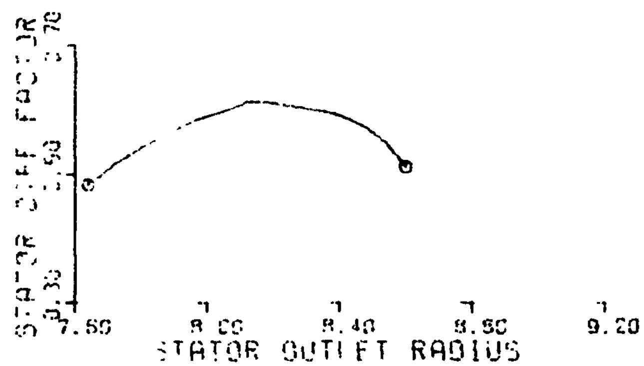


FIGURE 146. STATOR DIFFUSION FACTOR VS OUTLET RADIUS
(WITHIN-BLADE ANALYSIS, 80% SPEED)

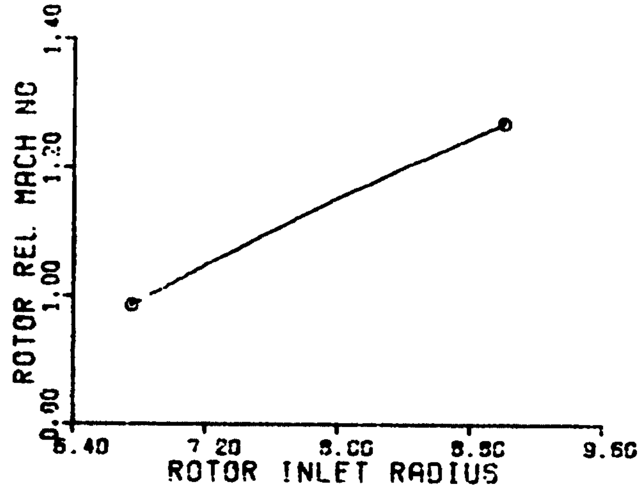


FIGURE 147. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

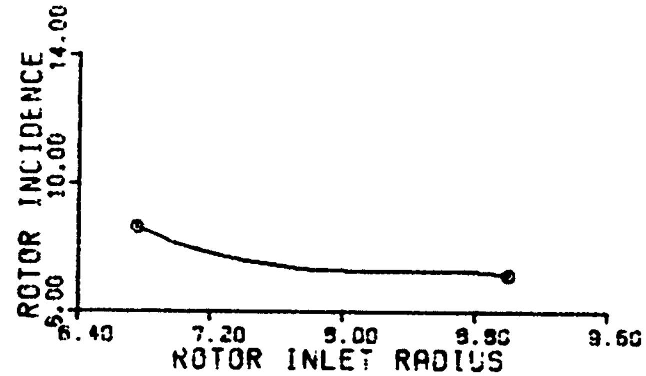


FIGURE 148. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

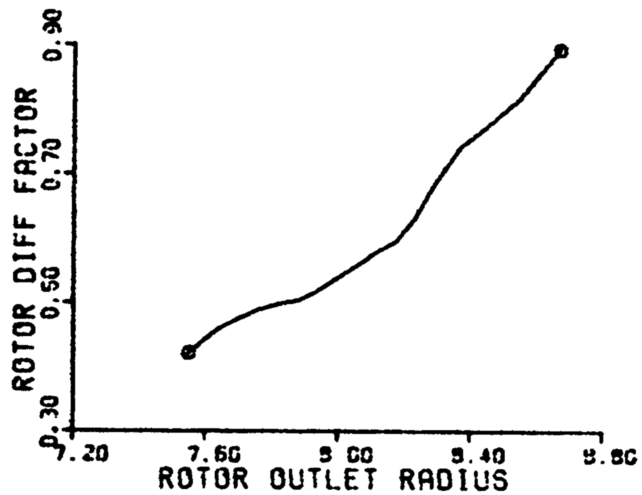


FIGURE 149. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

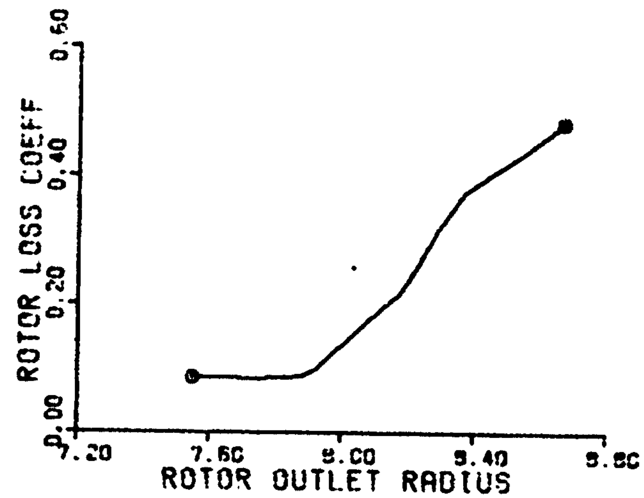


FIGURE 150. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

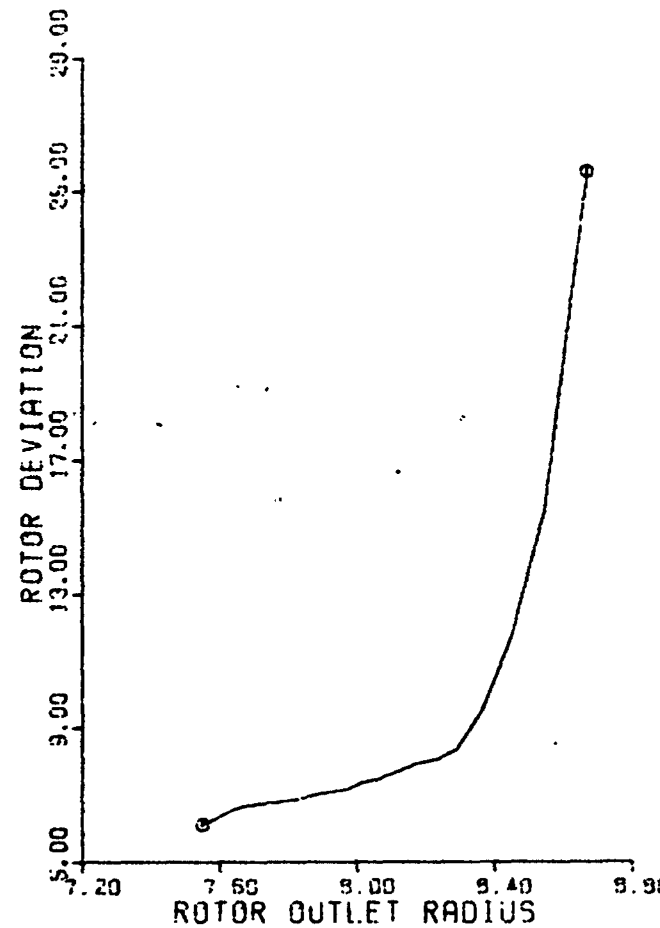


FIGURE 151. ROTOR DEVIATION VS OUTLET RADIUS
(WITHIN-BLADE ANALYSIS, 85% SPEED)

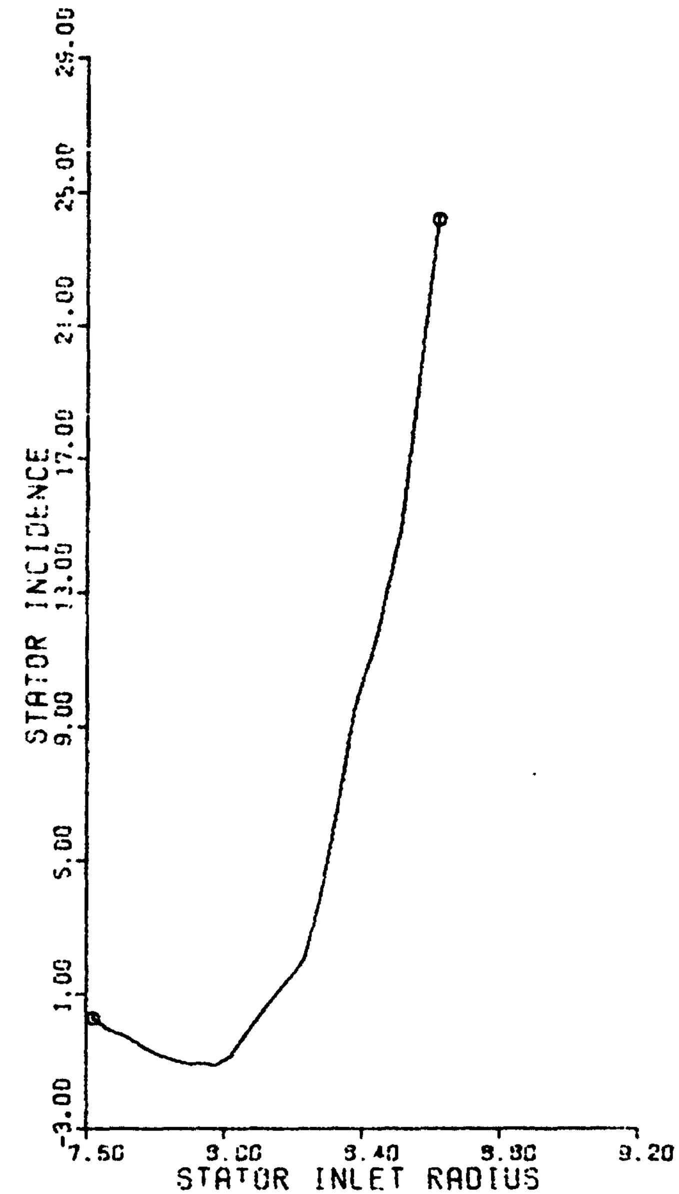


FIGURE 152. STATOR INCIDENCE VS INLET RADIUS
(WITHIN-BLADE ANALYSIS, 85% SPEED)

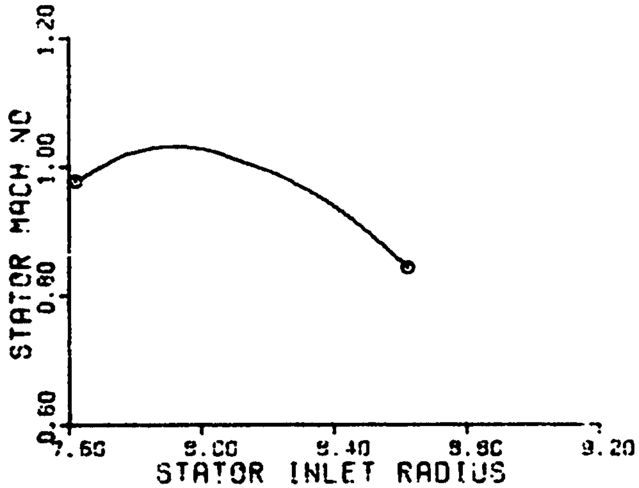


FIGURE 153. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

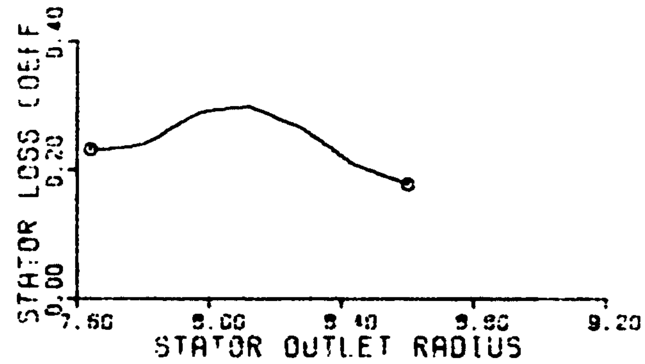


FIGURE 154. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

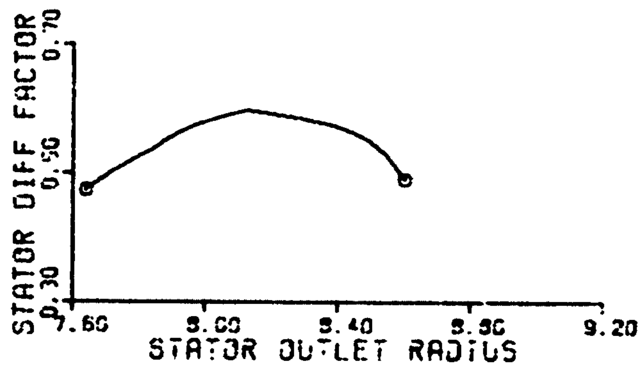


FIGURE 155. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

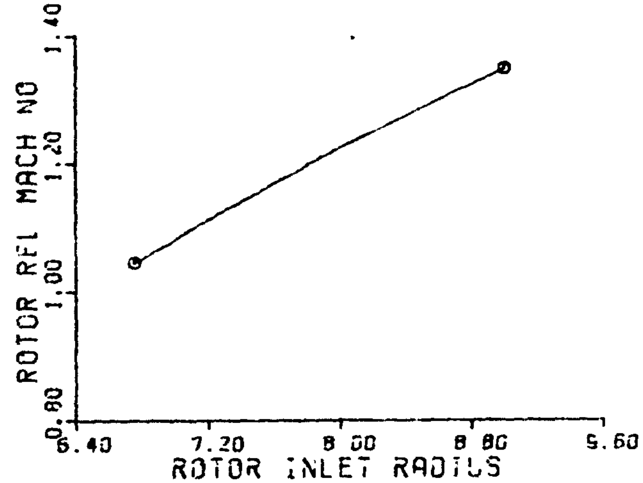


FIGURE 156. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

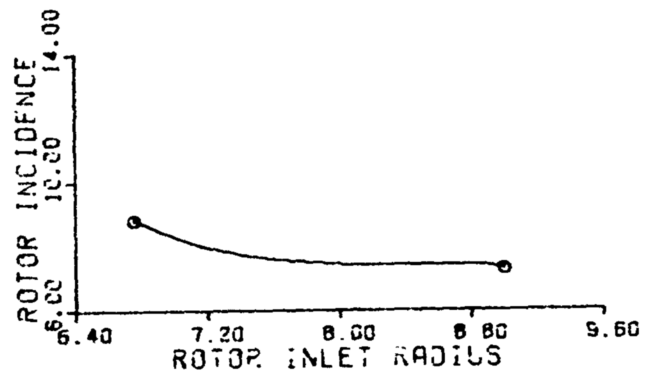


FIGURE 157. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

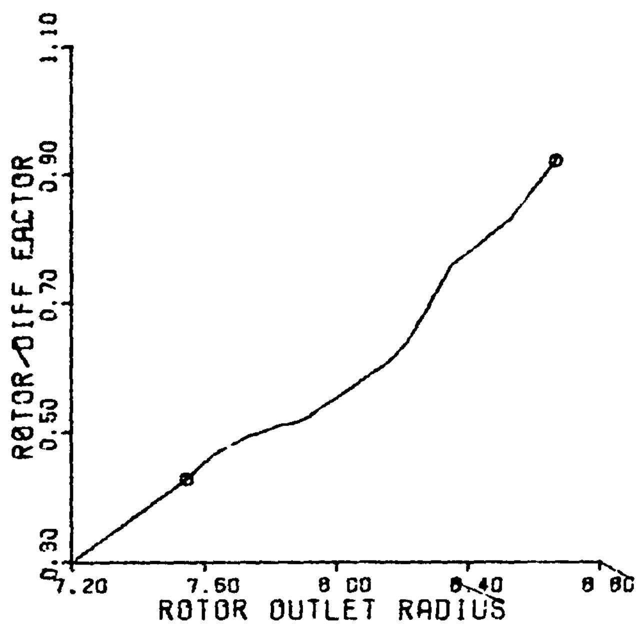


FIGURE 158. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

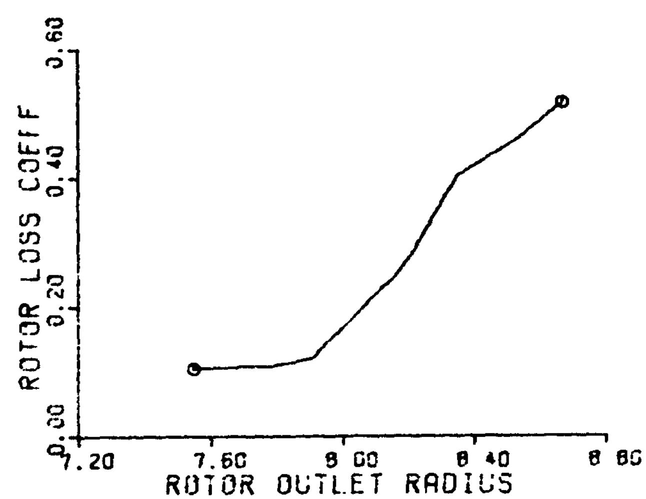


FIGURE 159. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

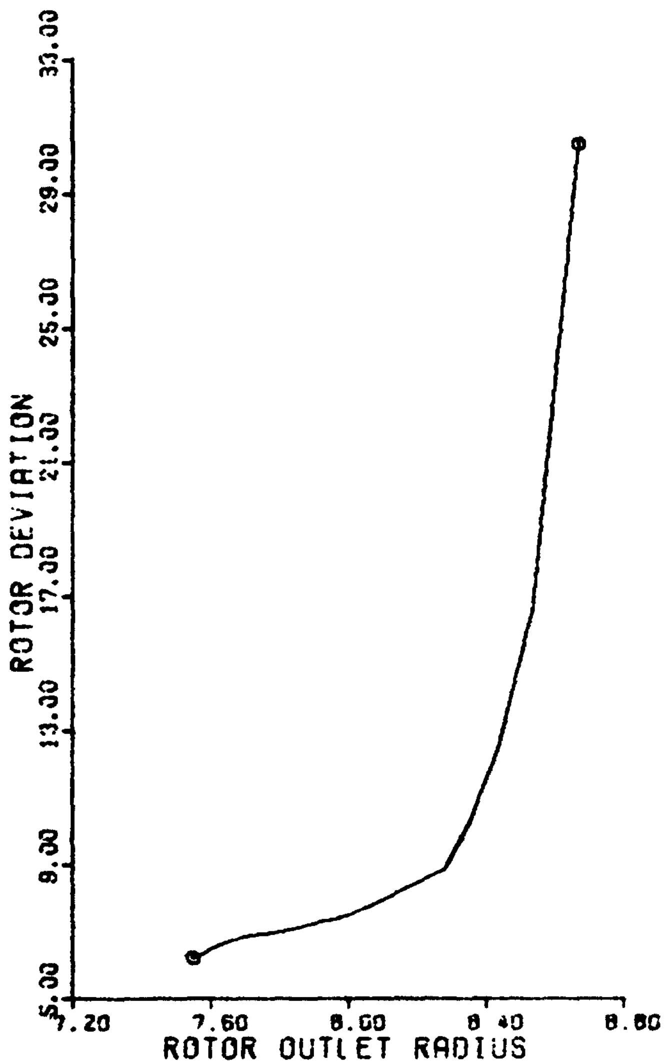


FIGURE 160. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

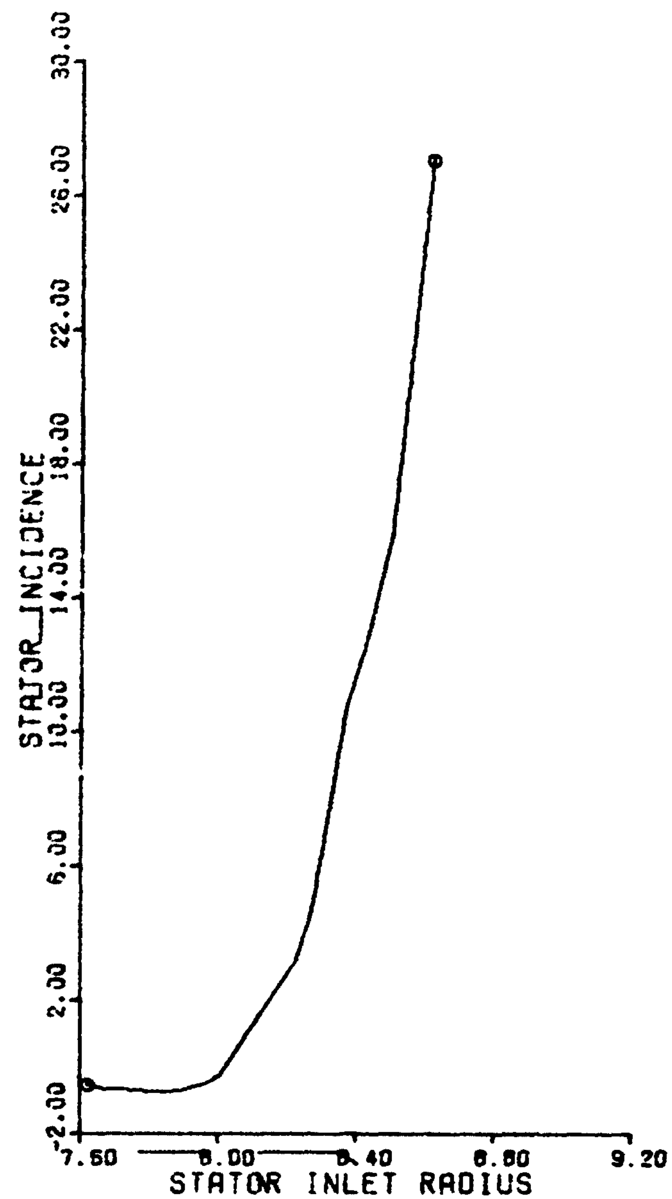


FIGURE 161. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS. 90% SPEED)

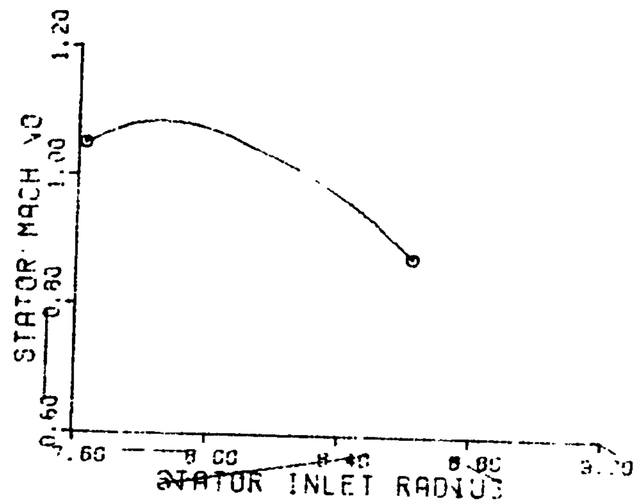


FIGURE 162. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

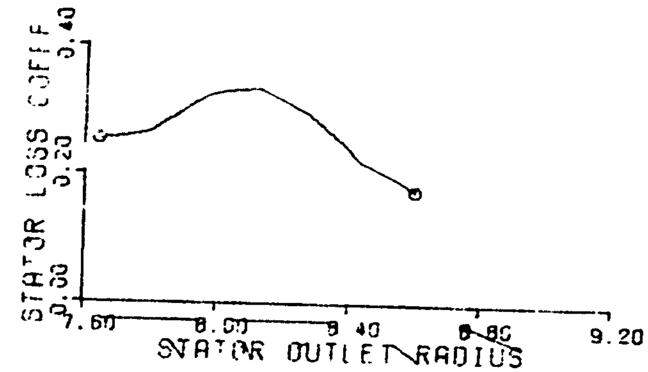


FIGURE 163. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

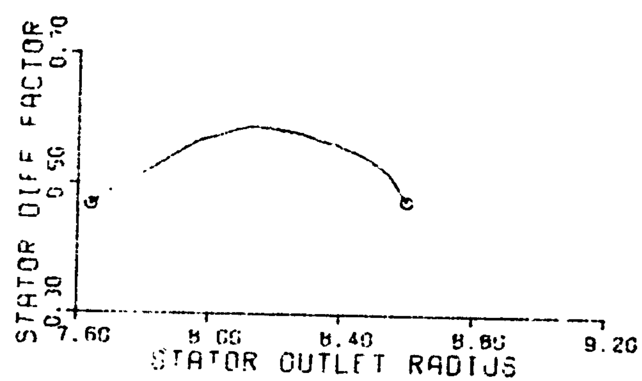


FIGURE 164. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

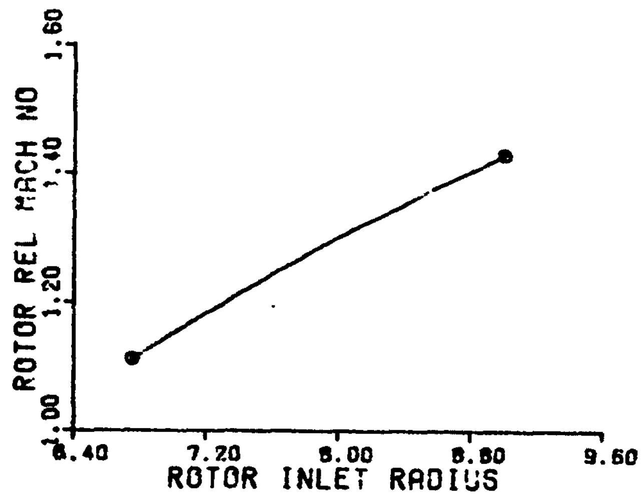


FIGURE 165. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

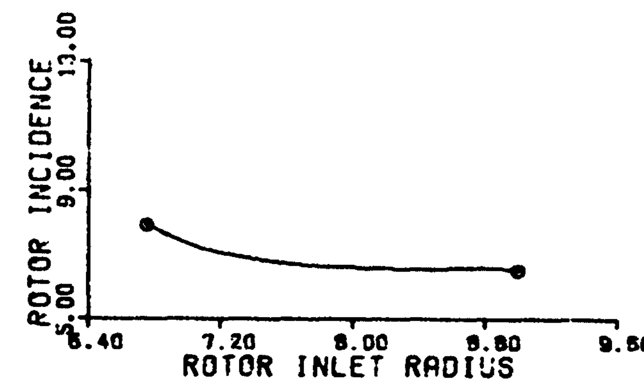


FIGURE 166. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

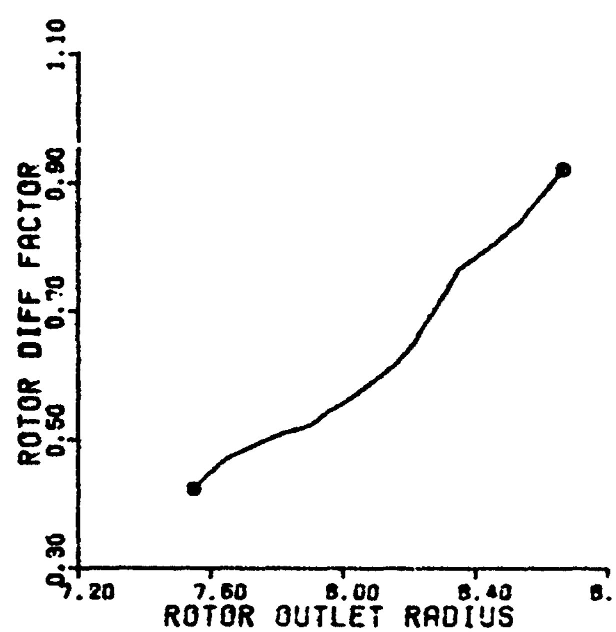


FIGURE 167. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

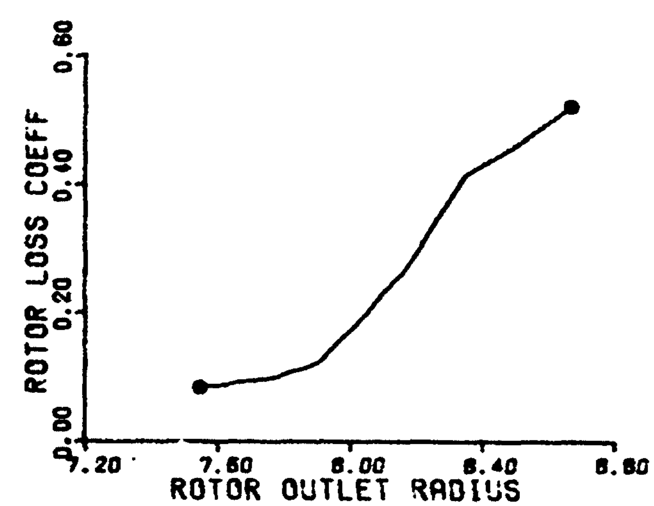


FIGURE 168. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

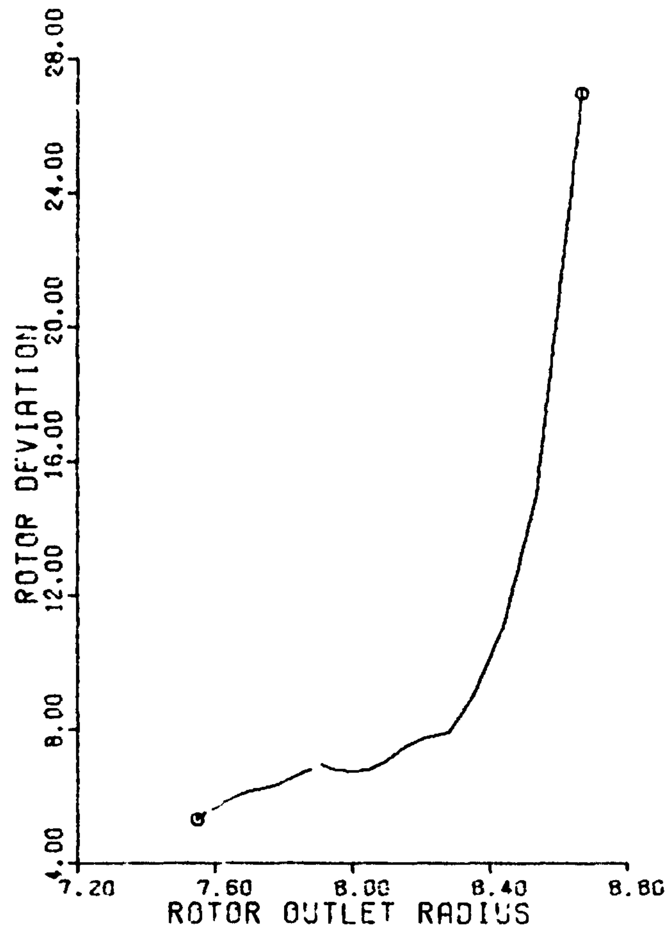


FIGURE 169. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

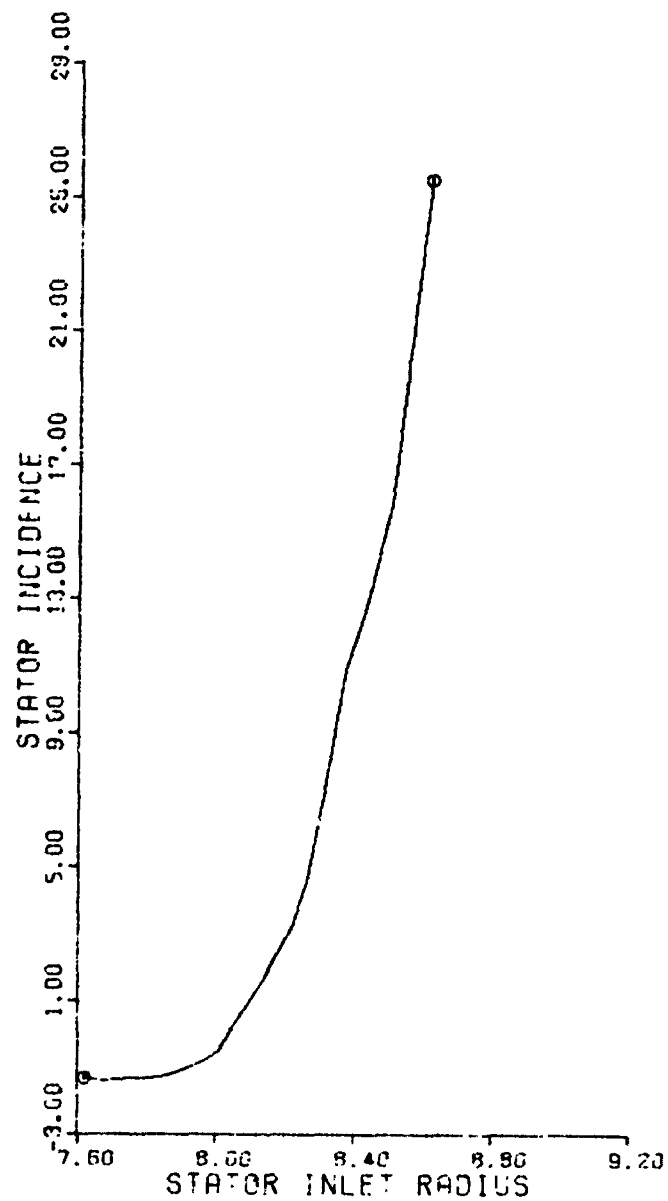


FIGURE 170. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

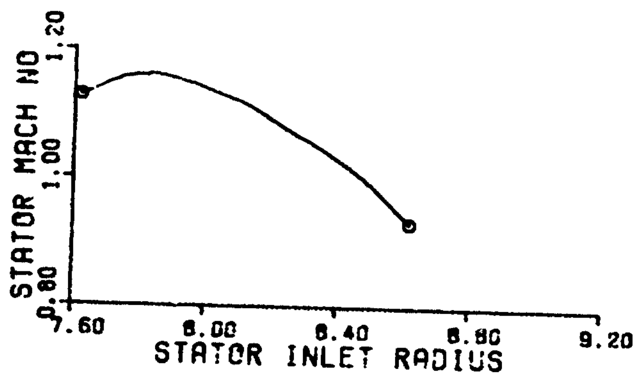


FIGURE 171. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

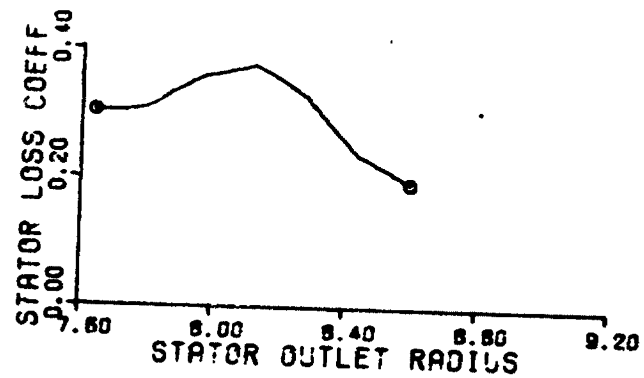


FIGURE 172. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

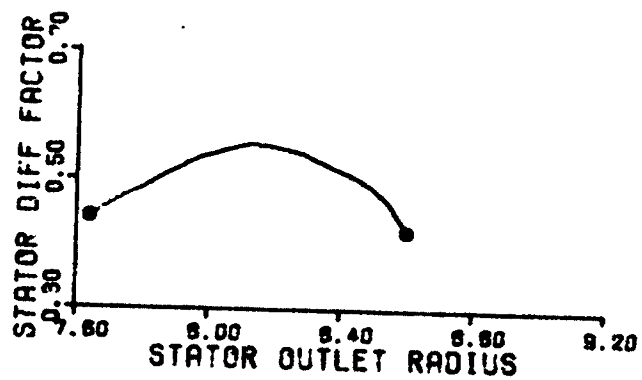


FIGURE 173. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

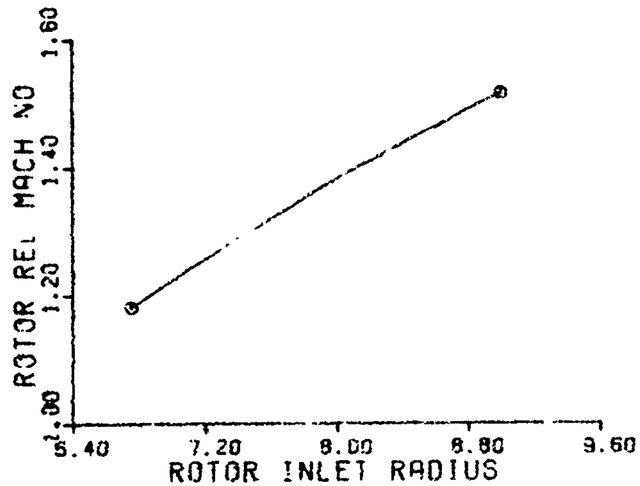


FIGURE 174. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

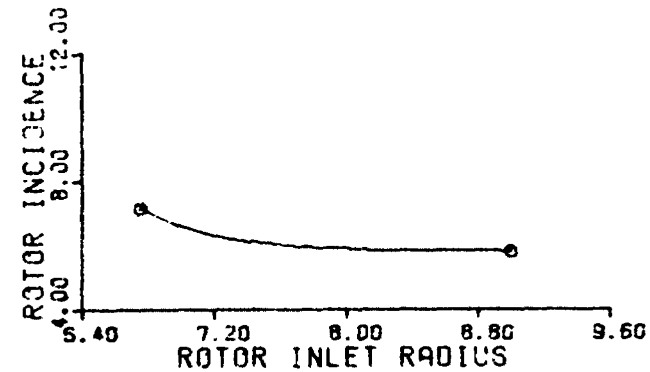


FIGURE 175. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

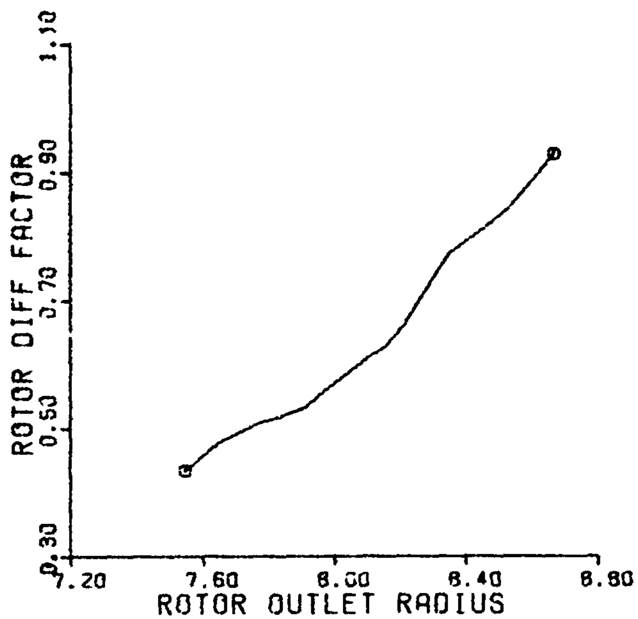


FIGURE 176. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

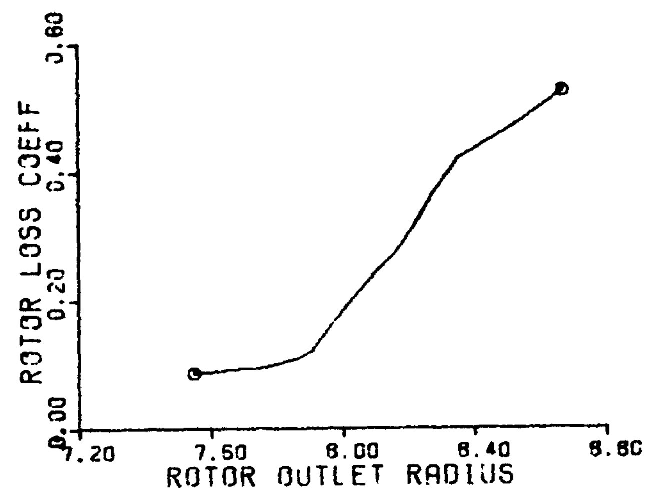


FIGURE 177. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

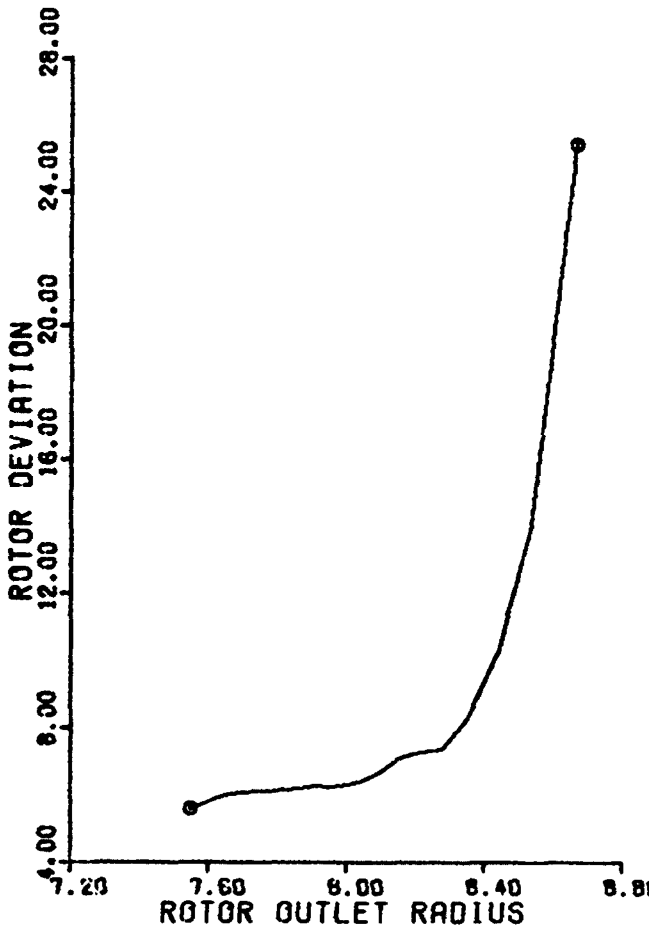


FIGURE 178. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

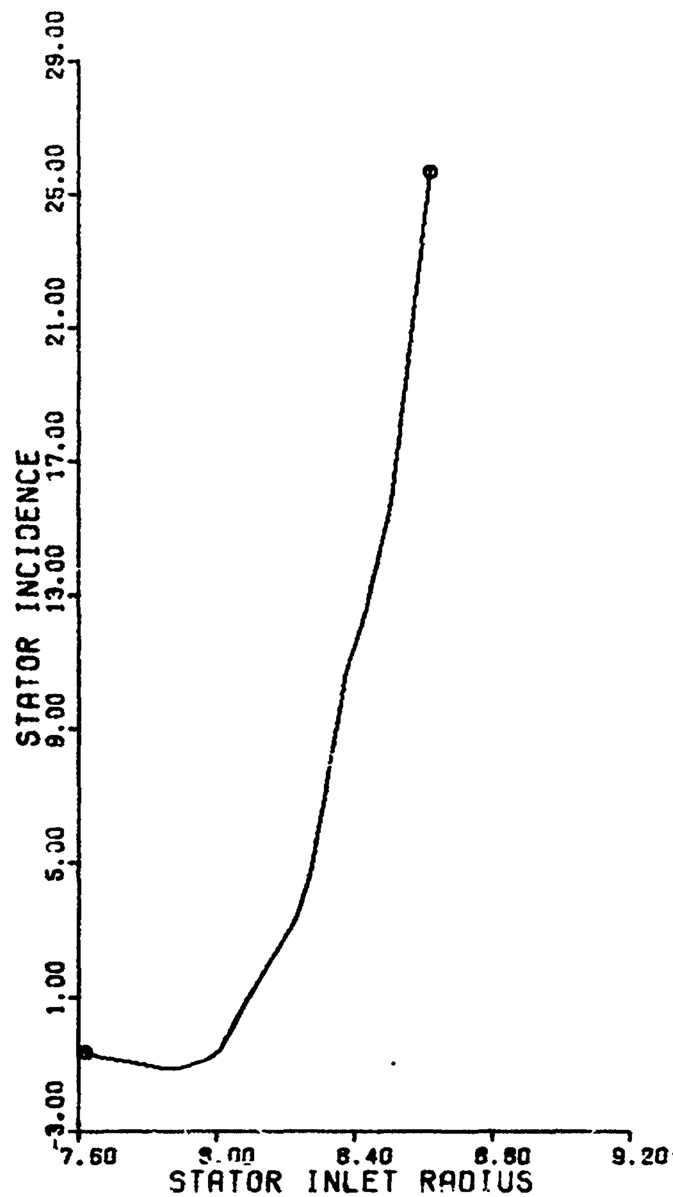


FIGURE 179. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ALALYSIS, 100% SPEED)

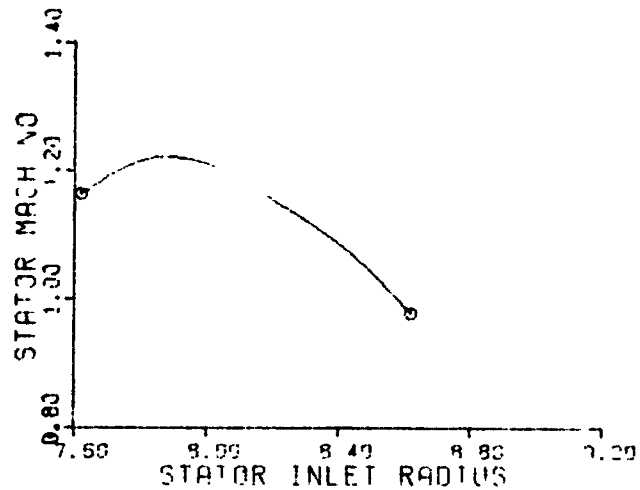


FIGURE 180. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

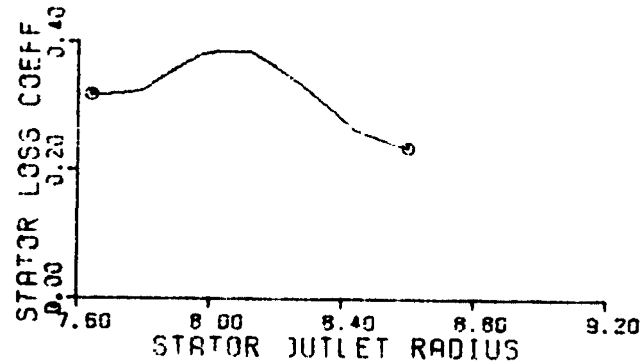


FIGURE 181. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

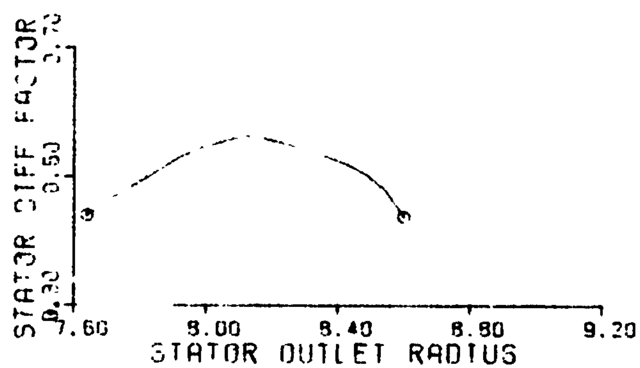


FIGURE 182. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

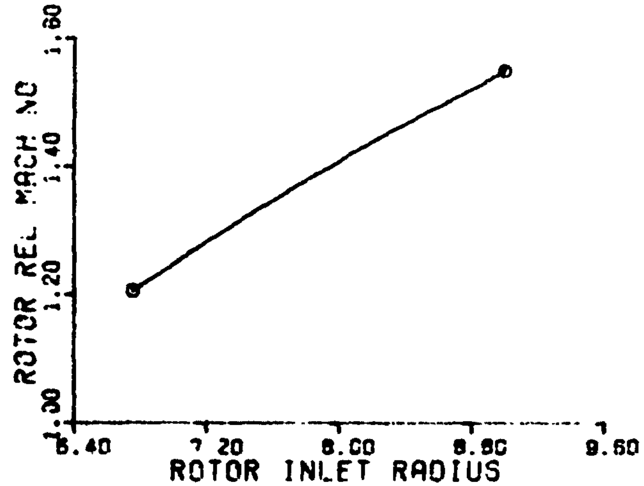


FIGURE 183. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

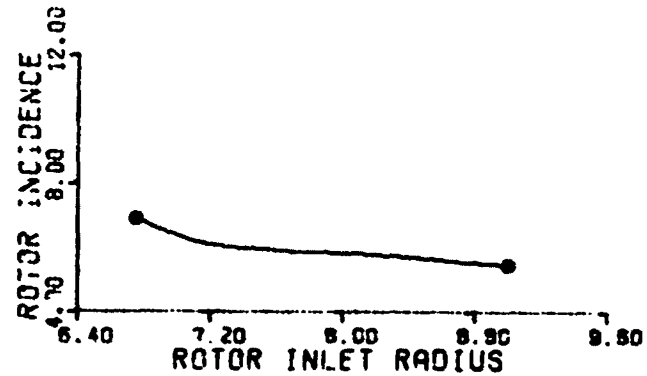


FIGURE 184. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

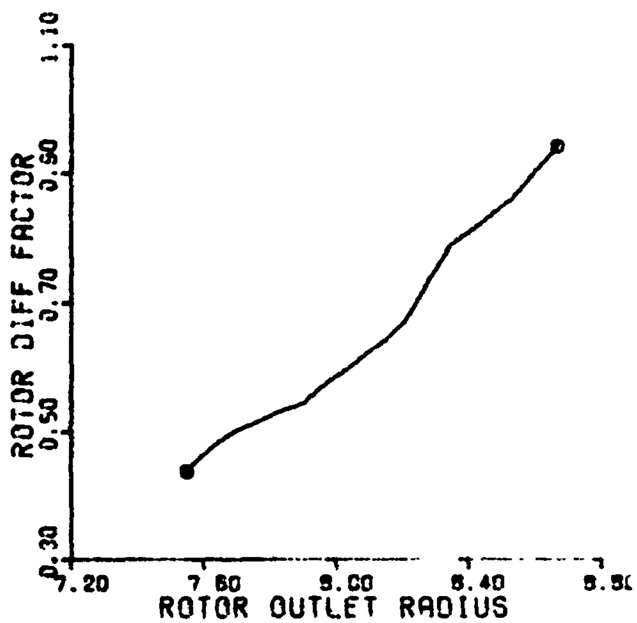


FIGURE 185. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

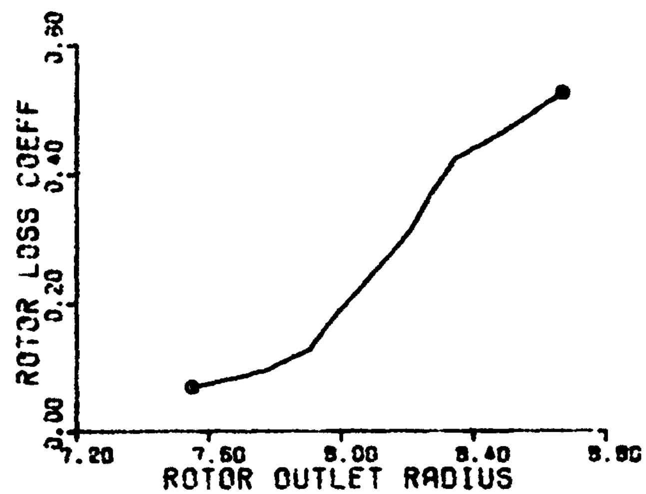


FIGURE 186. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

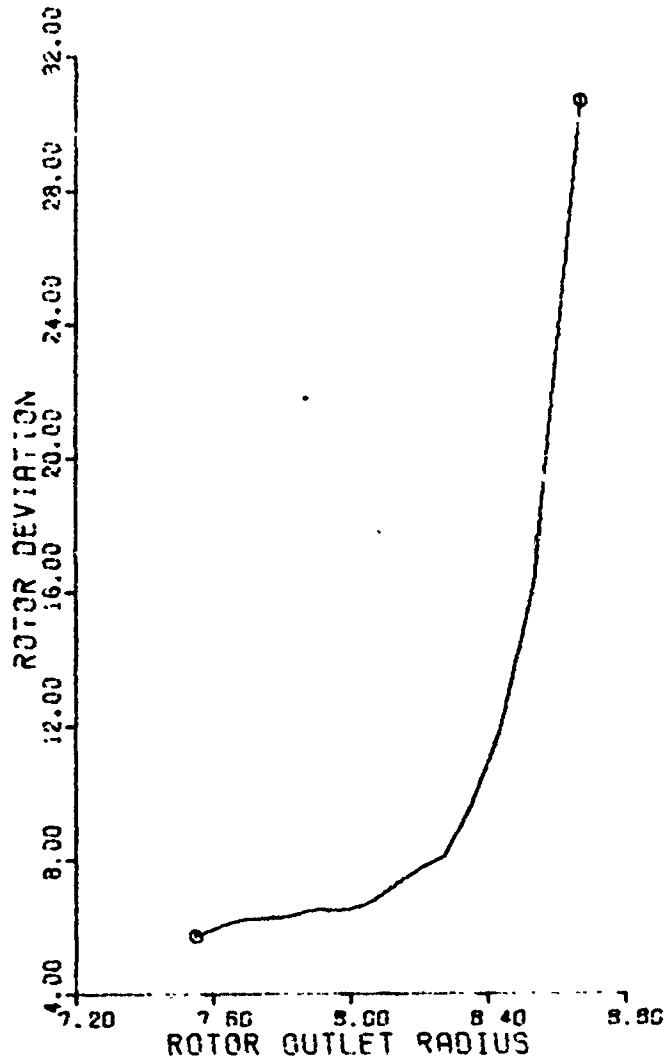


FIGURE 187. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

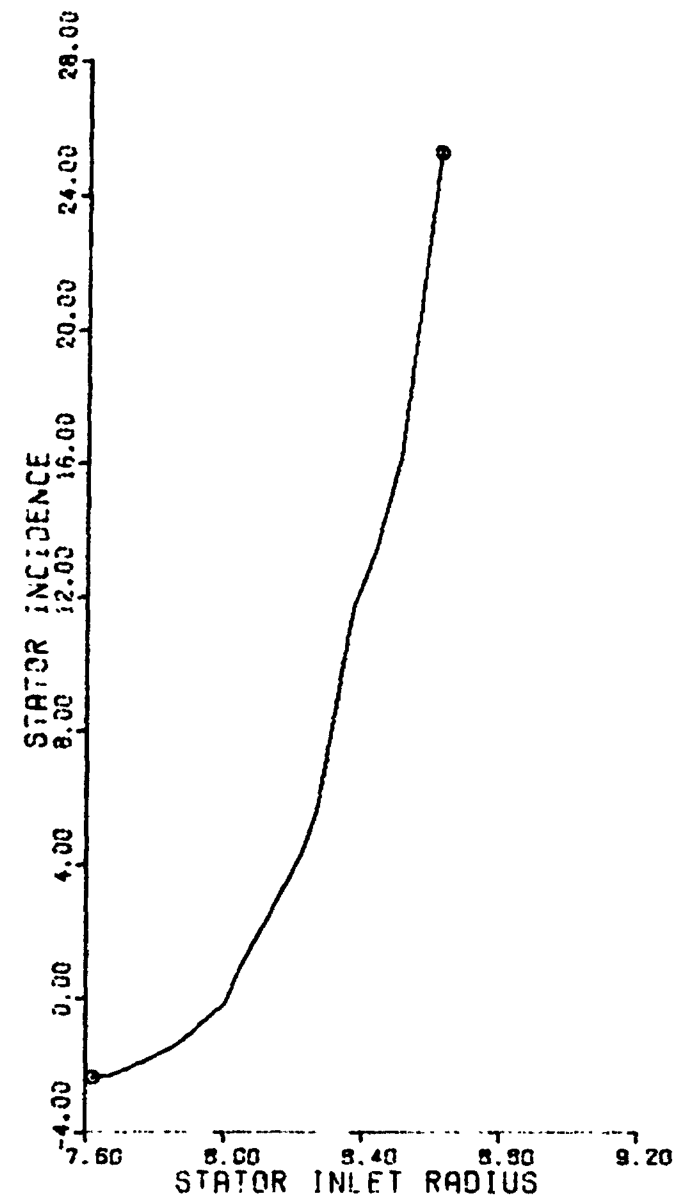


FIGURE 188. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

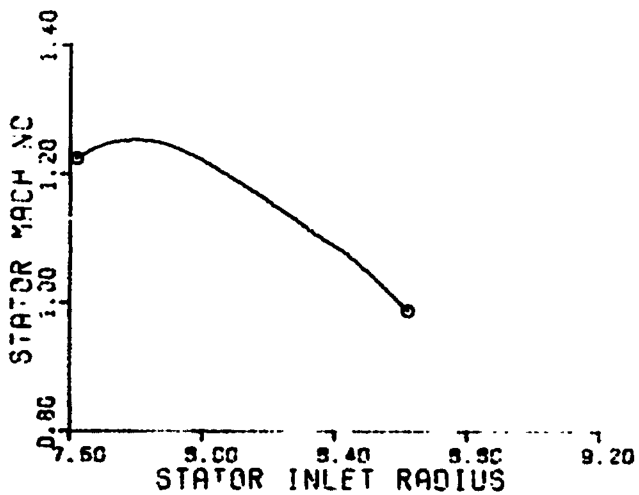


FIGURE 189 STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

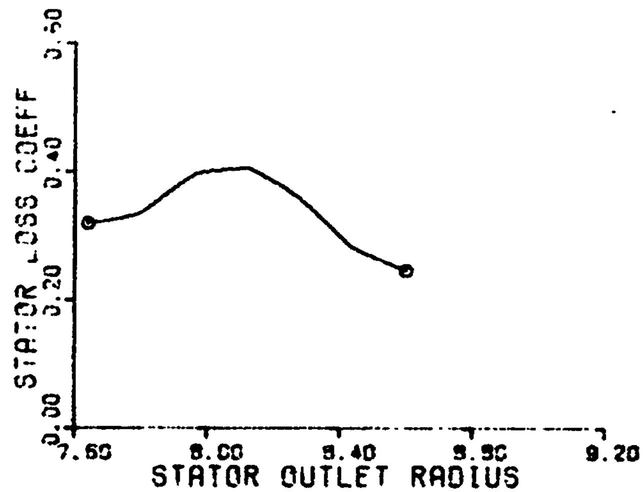


FIGURE 190. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

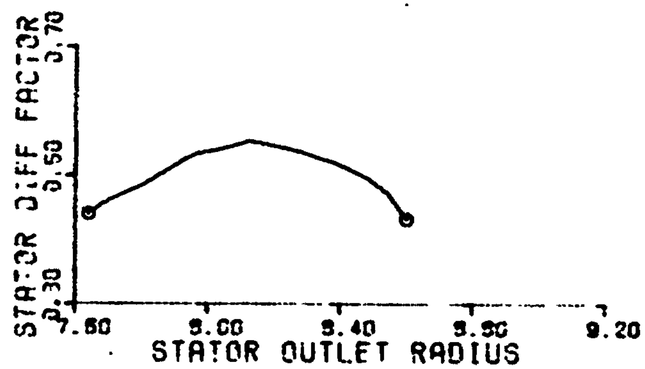


FIGURE 191. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

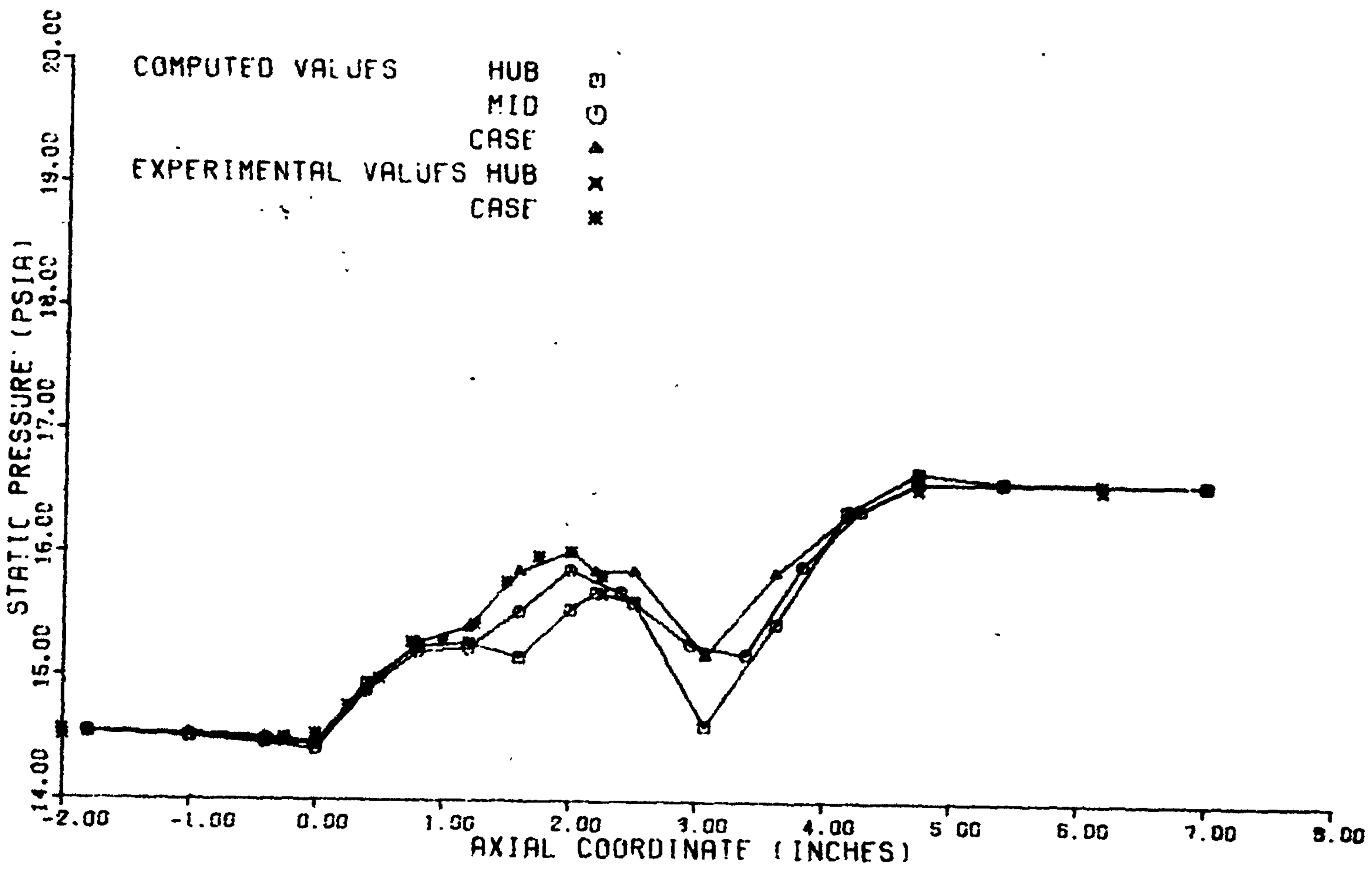


FIGURE 192. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 40% SPEED)

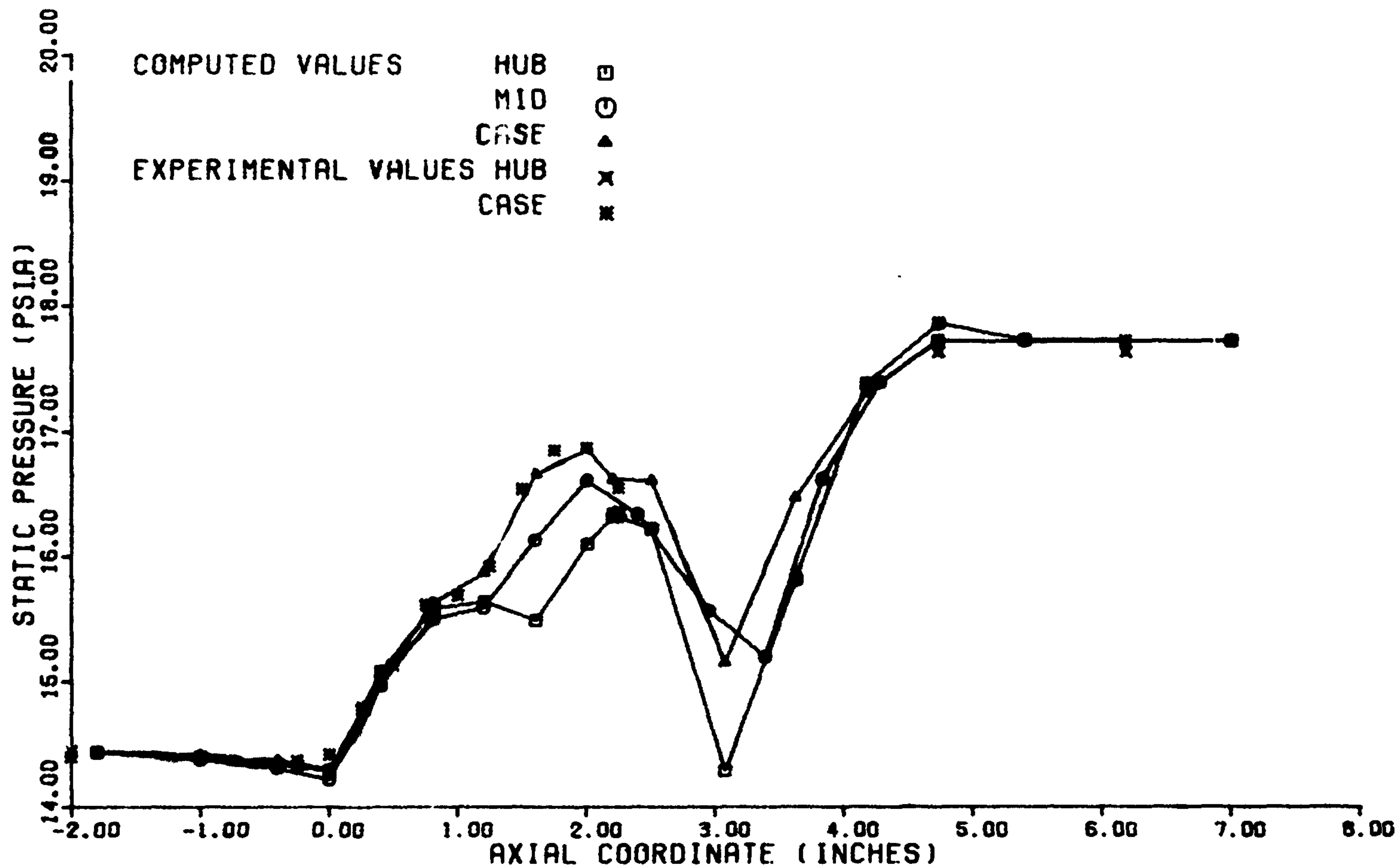


FIGURE 193. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 50% SPEED)

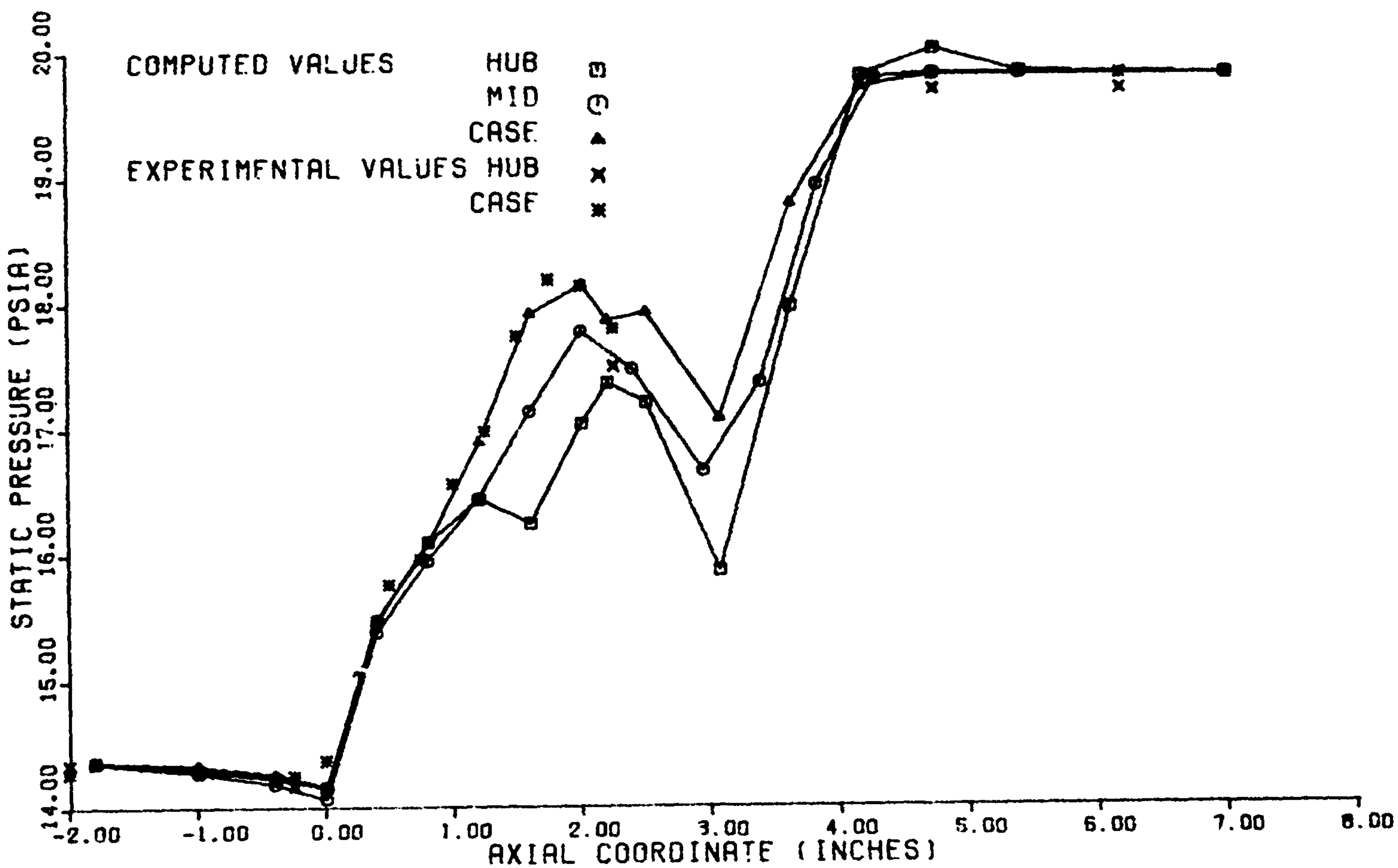


FIGURE 194. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 60% SPEED)

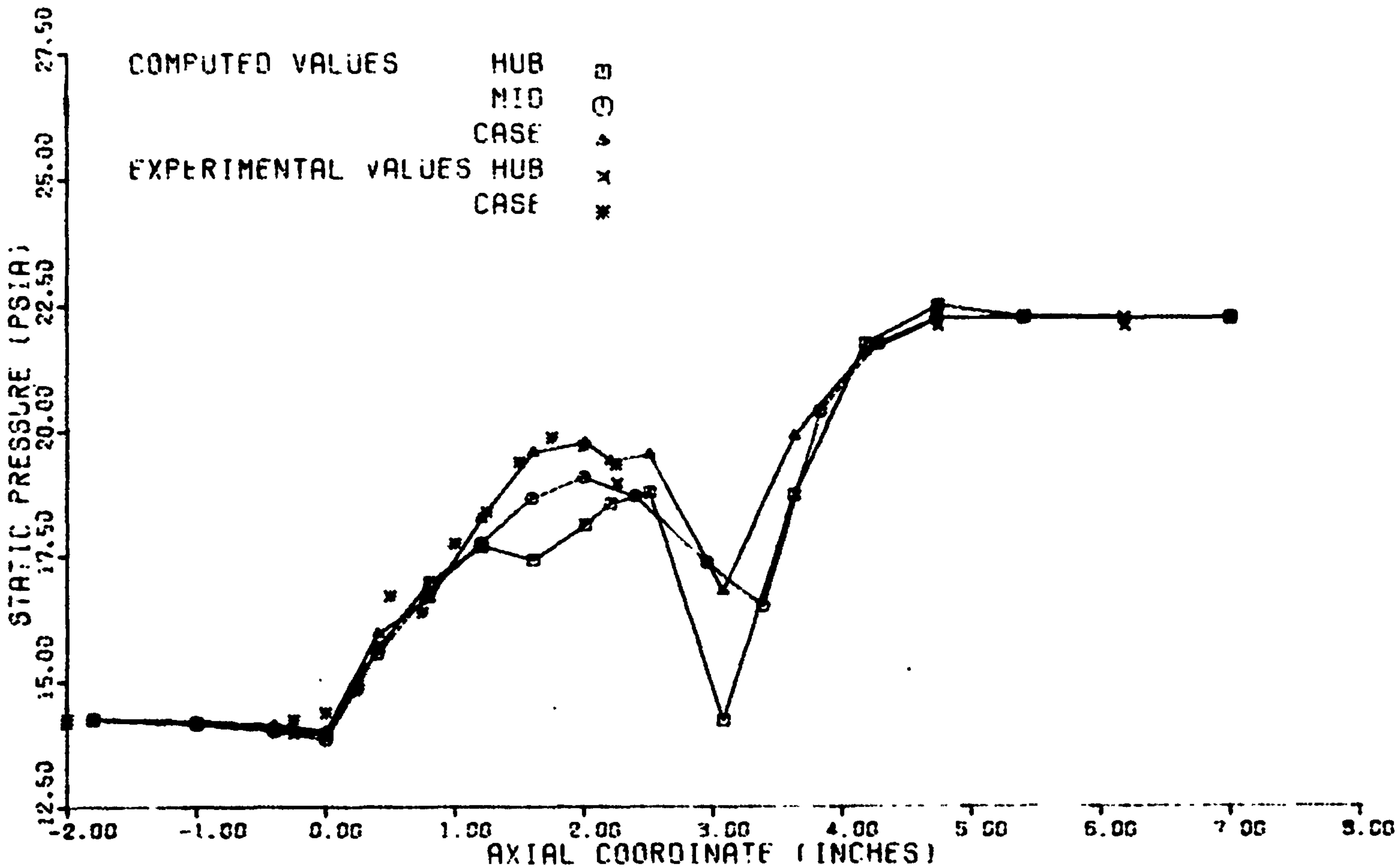


FIGURE 195. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 70% SPEED)

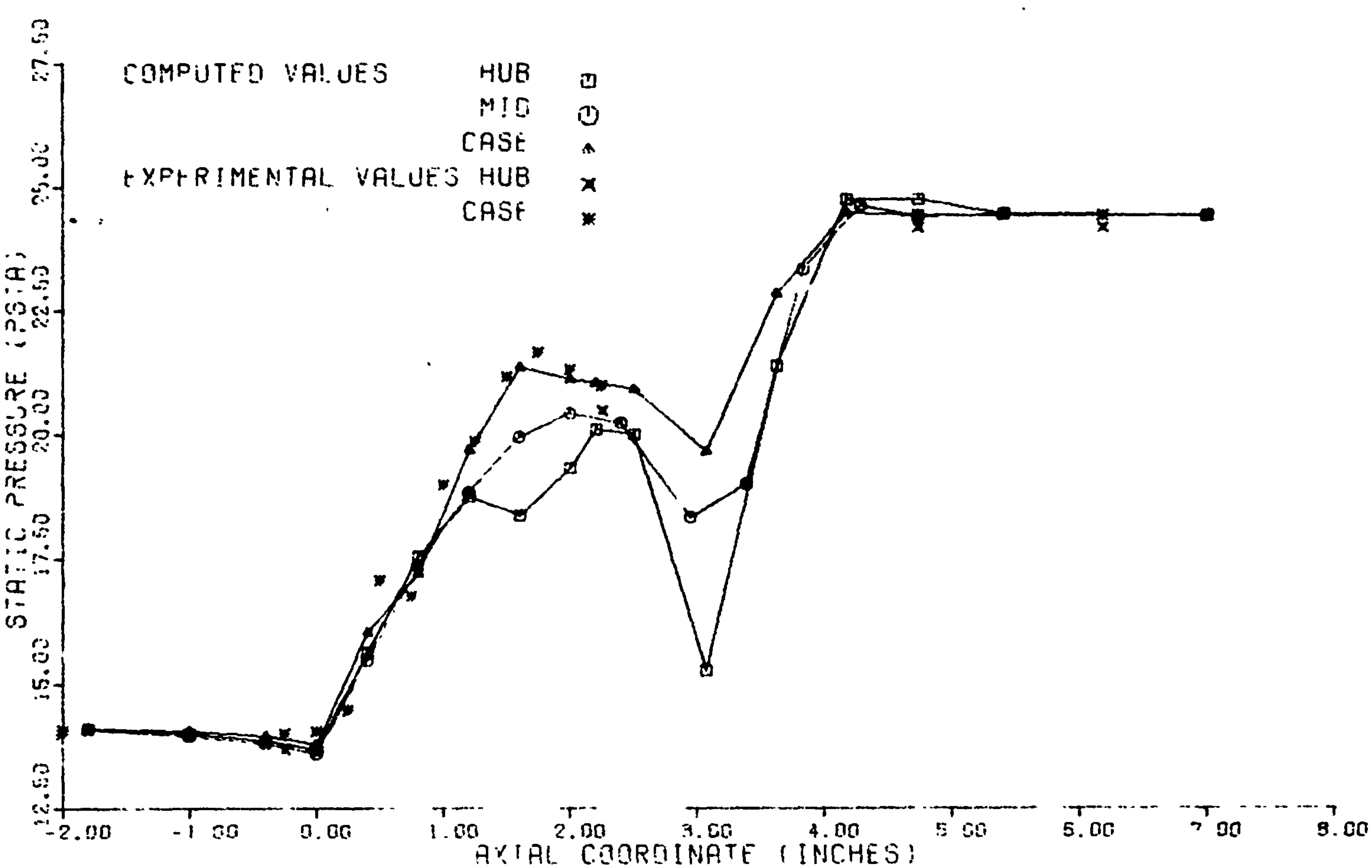


FIGURE 196. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 80% SPEED)

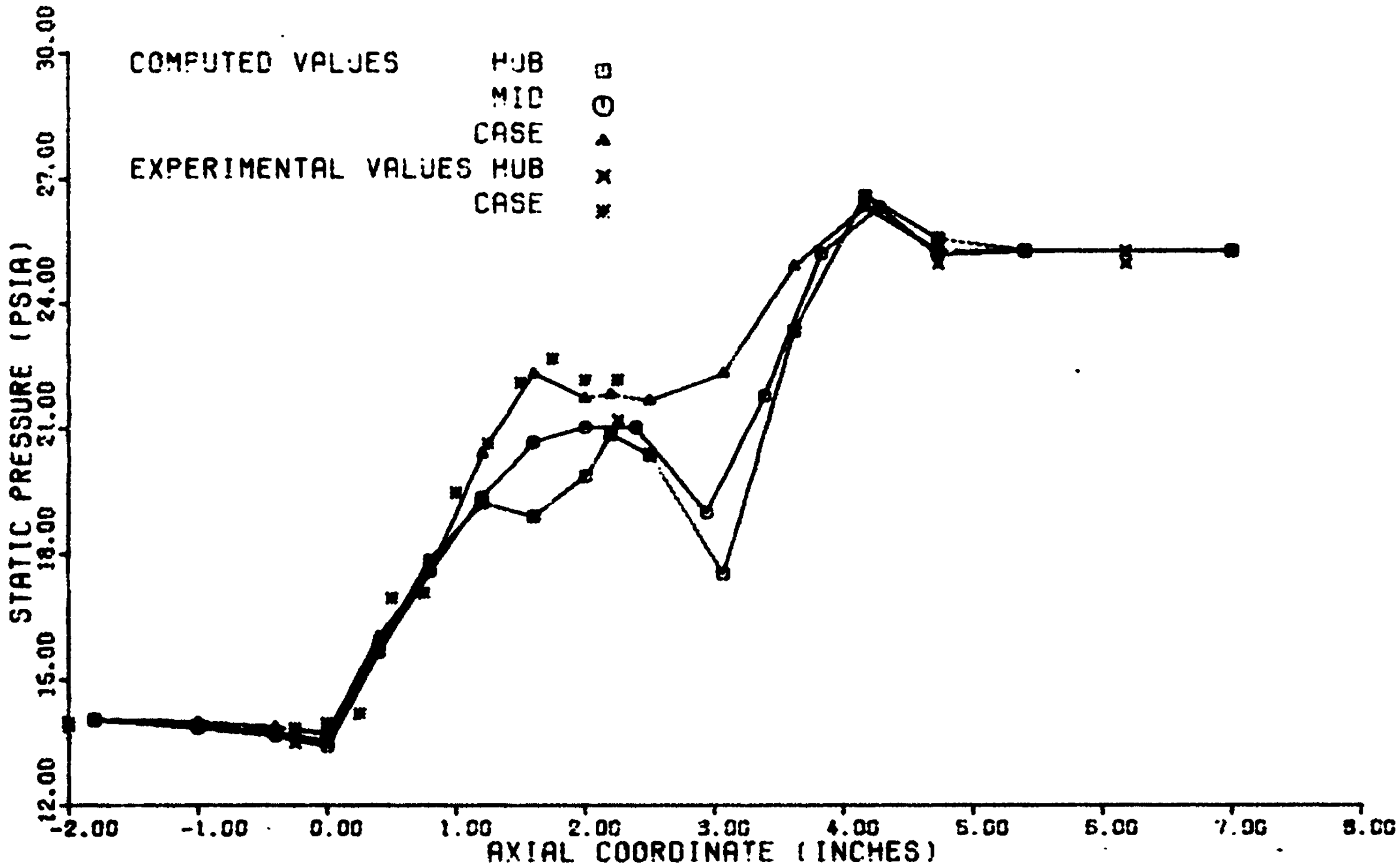


FIGURE 197. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 85% SPEED)

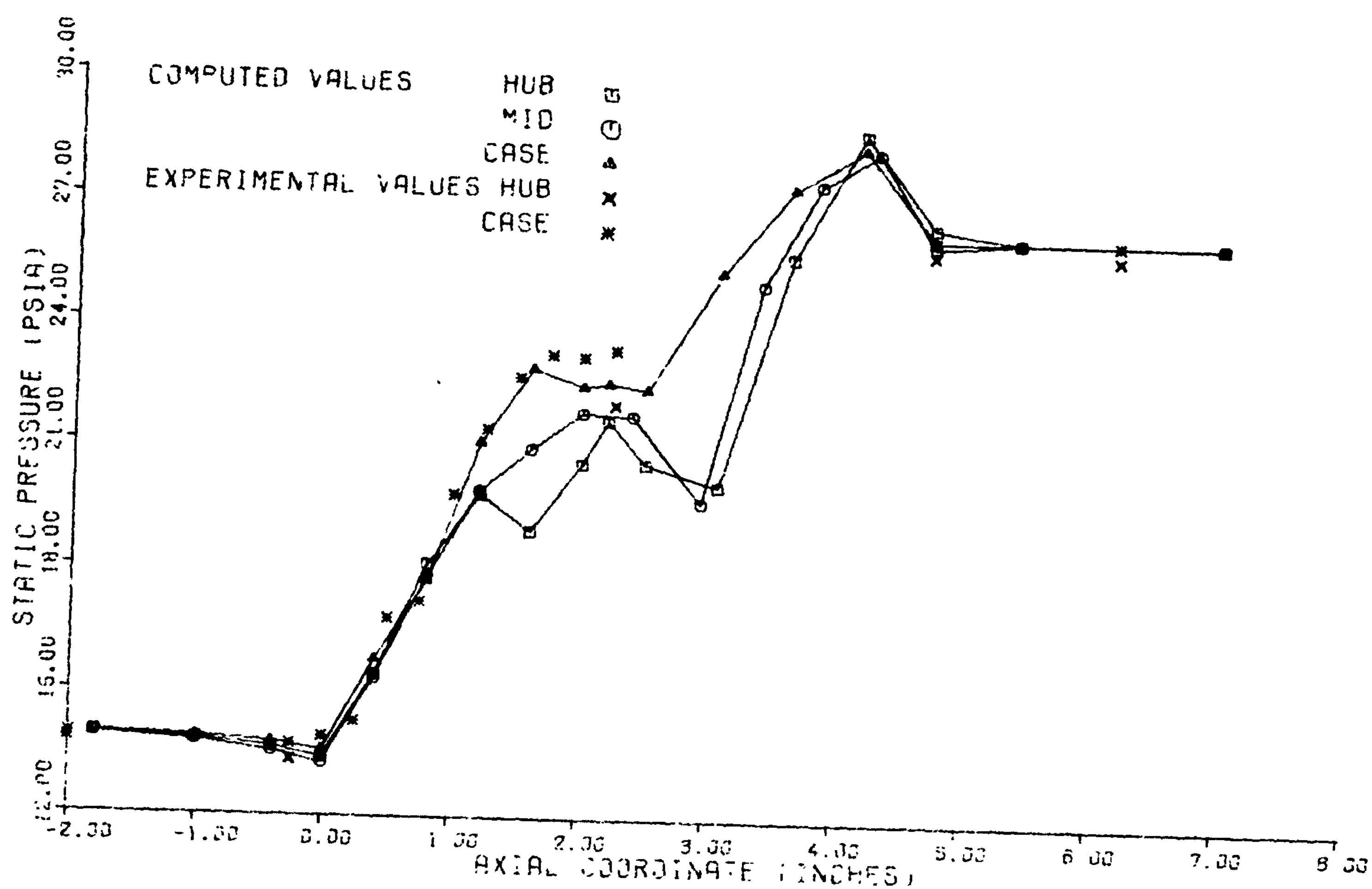


FIGURE 198. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 90% SPEED)

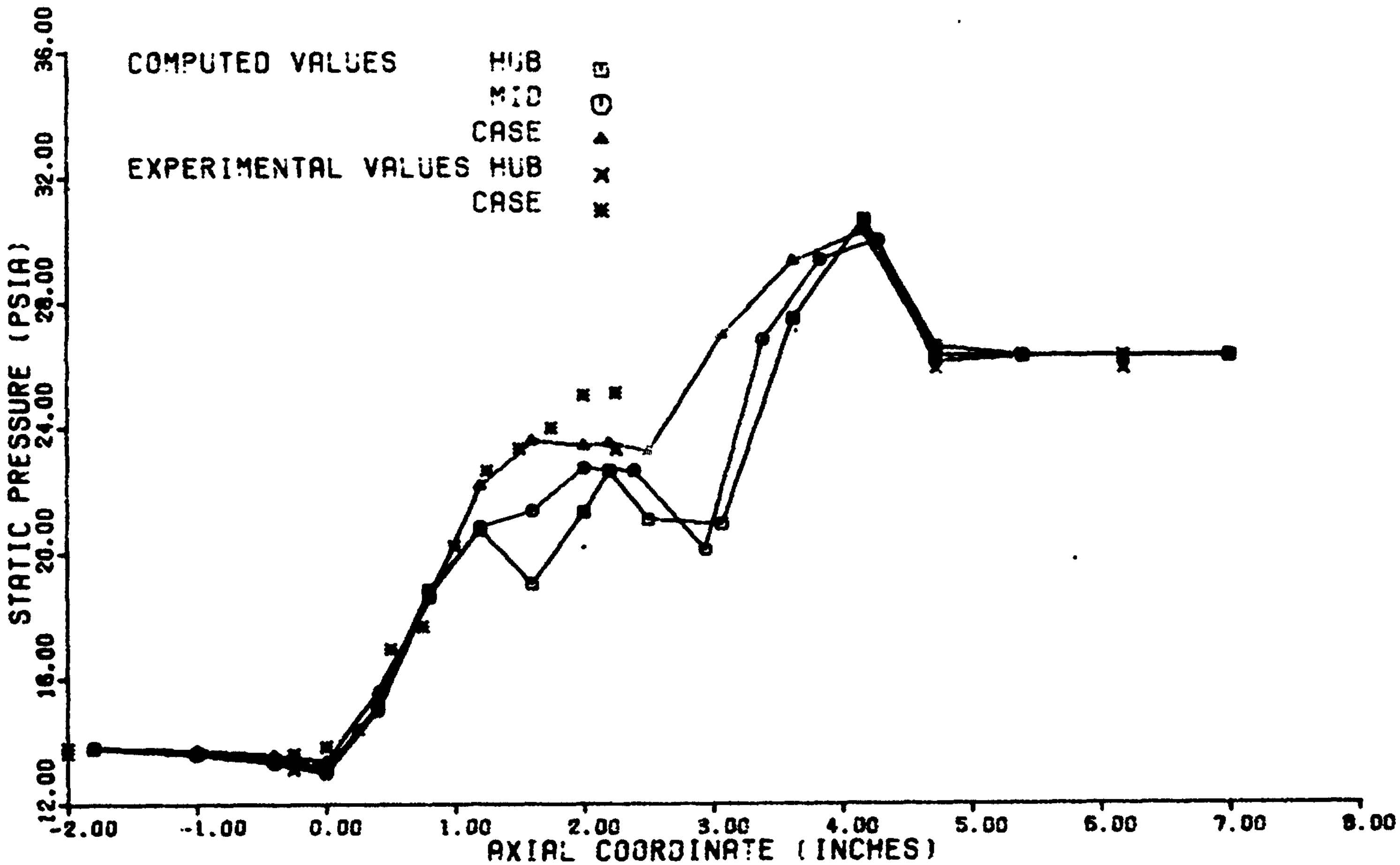


FIGURE 199. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 95% SPEED)

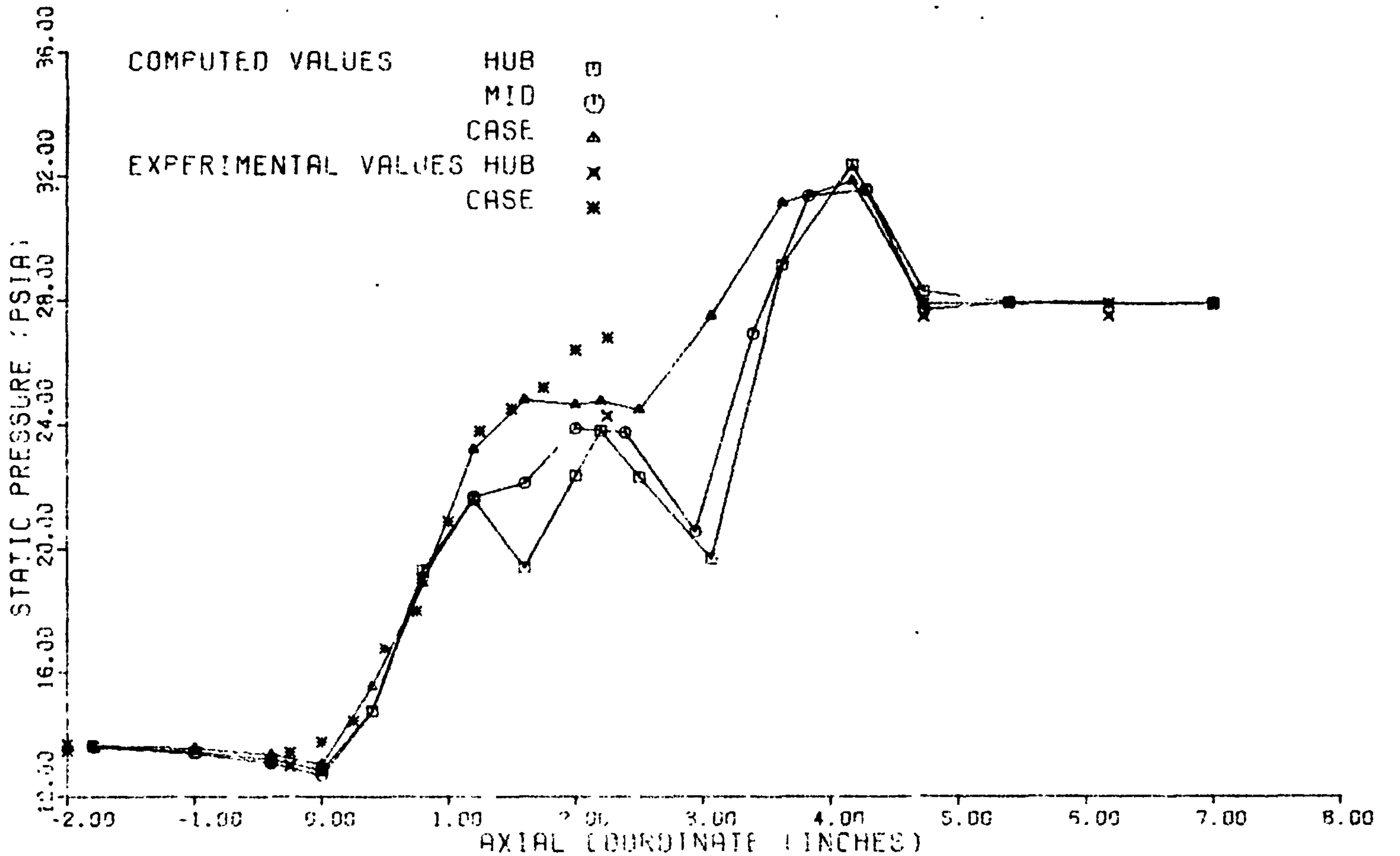


FIGURE 200. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 100% SPEED)

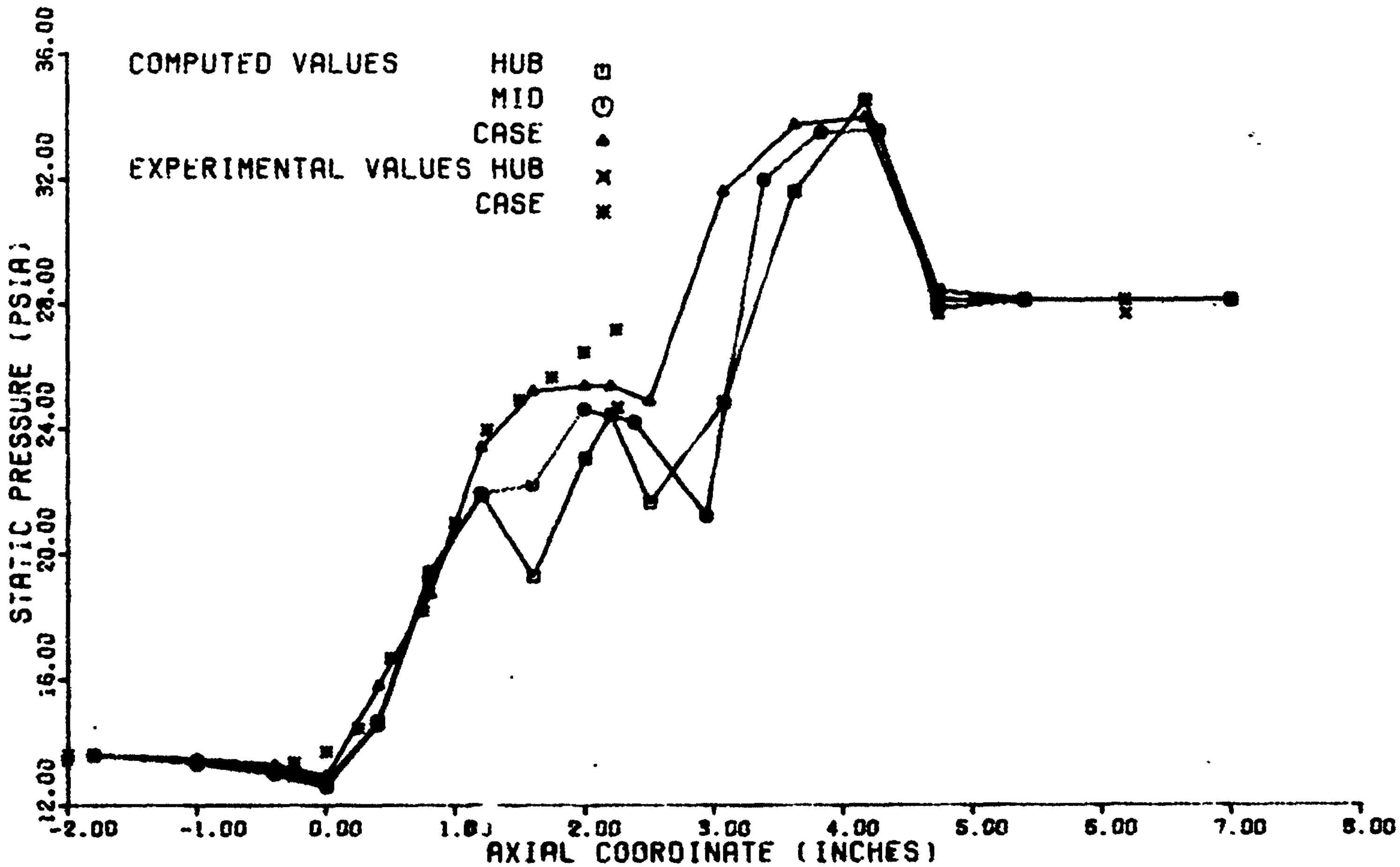


FIGURE 201. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 102% SPEED)

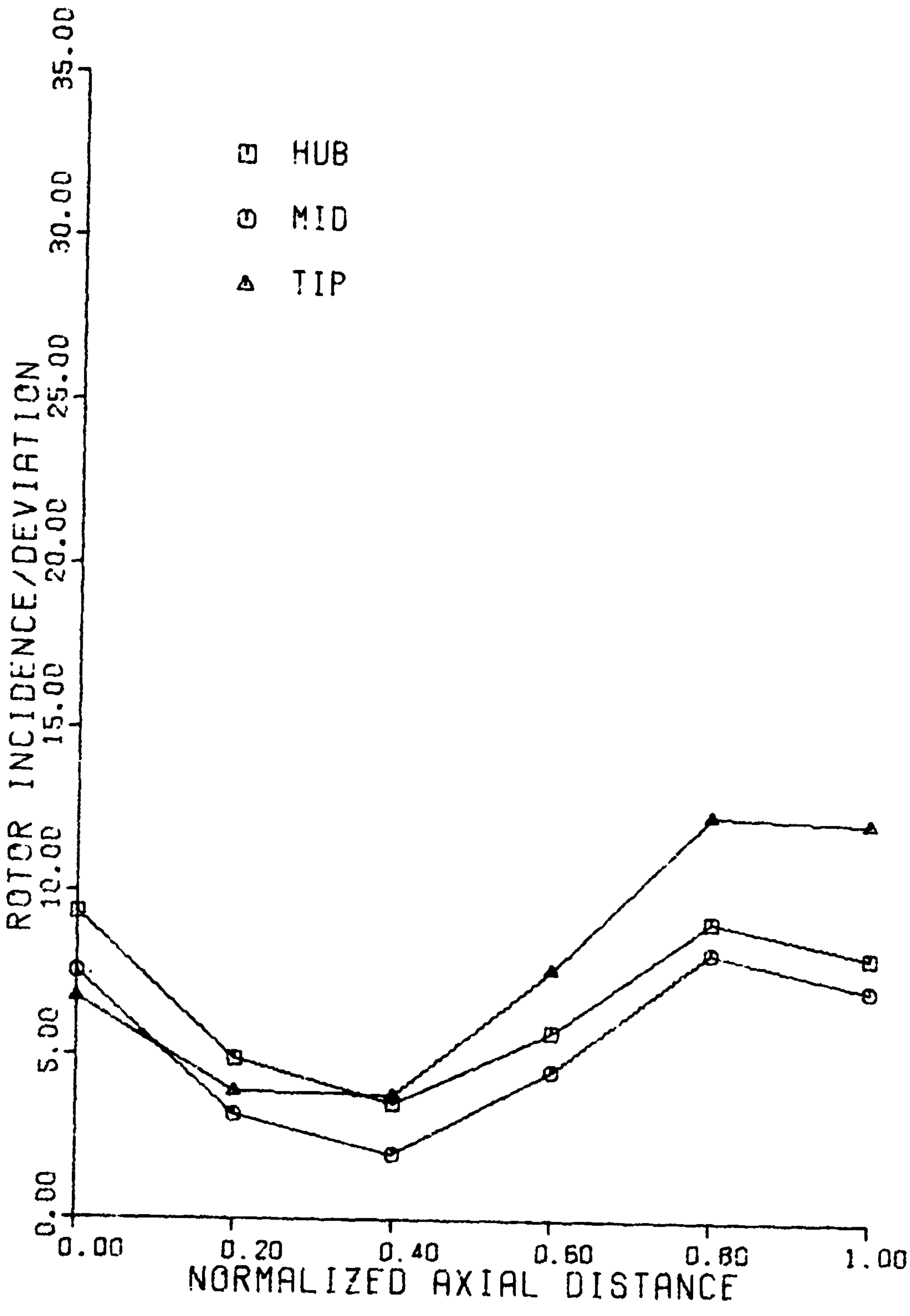


FIGURE 202. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (40% SPEED POINT)

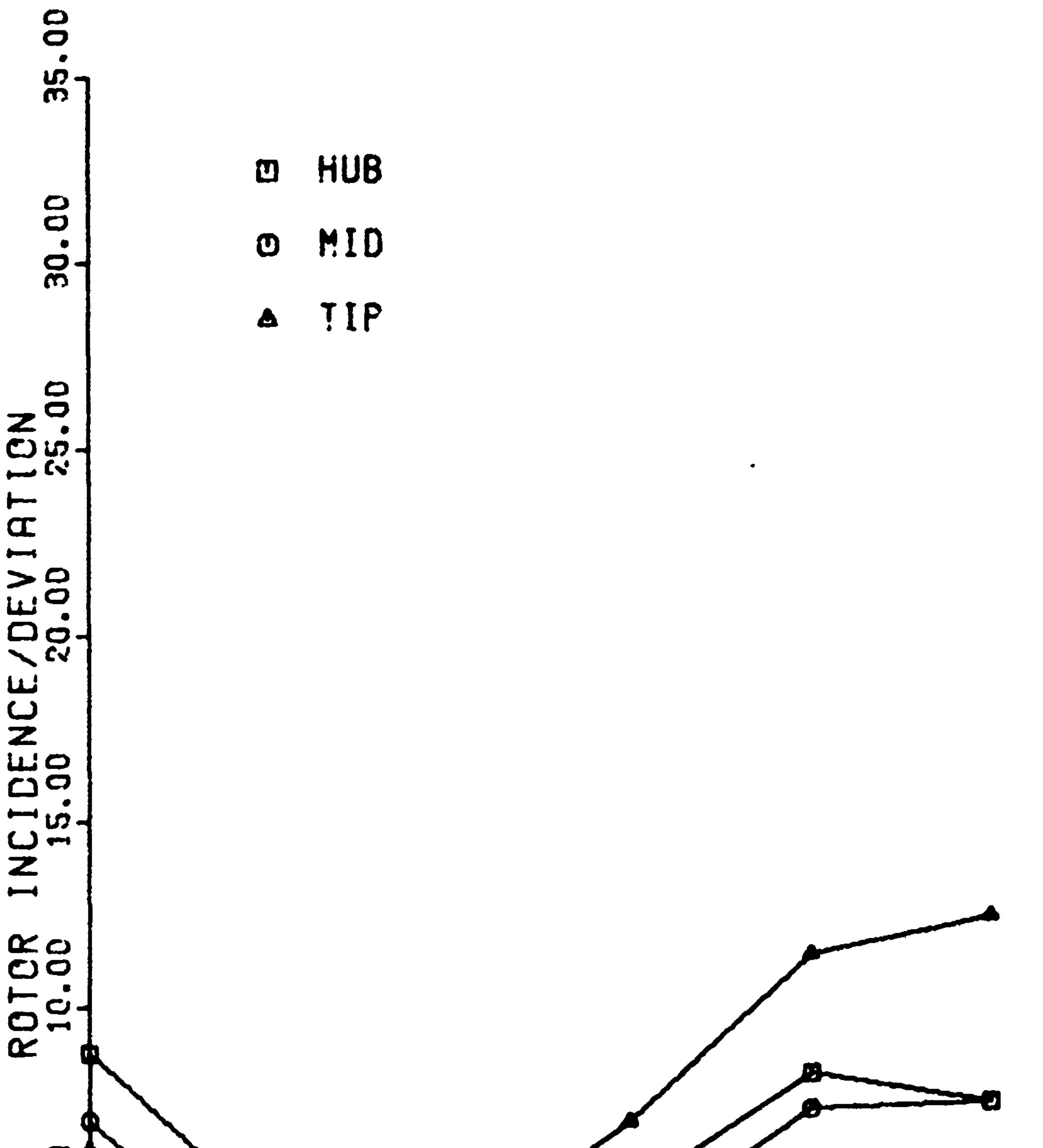


FIGURE 203. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (50% SPEED POINT)

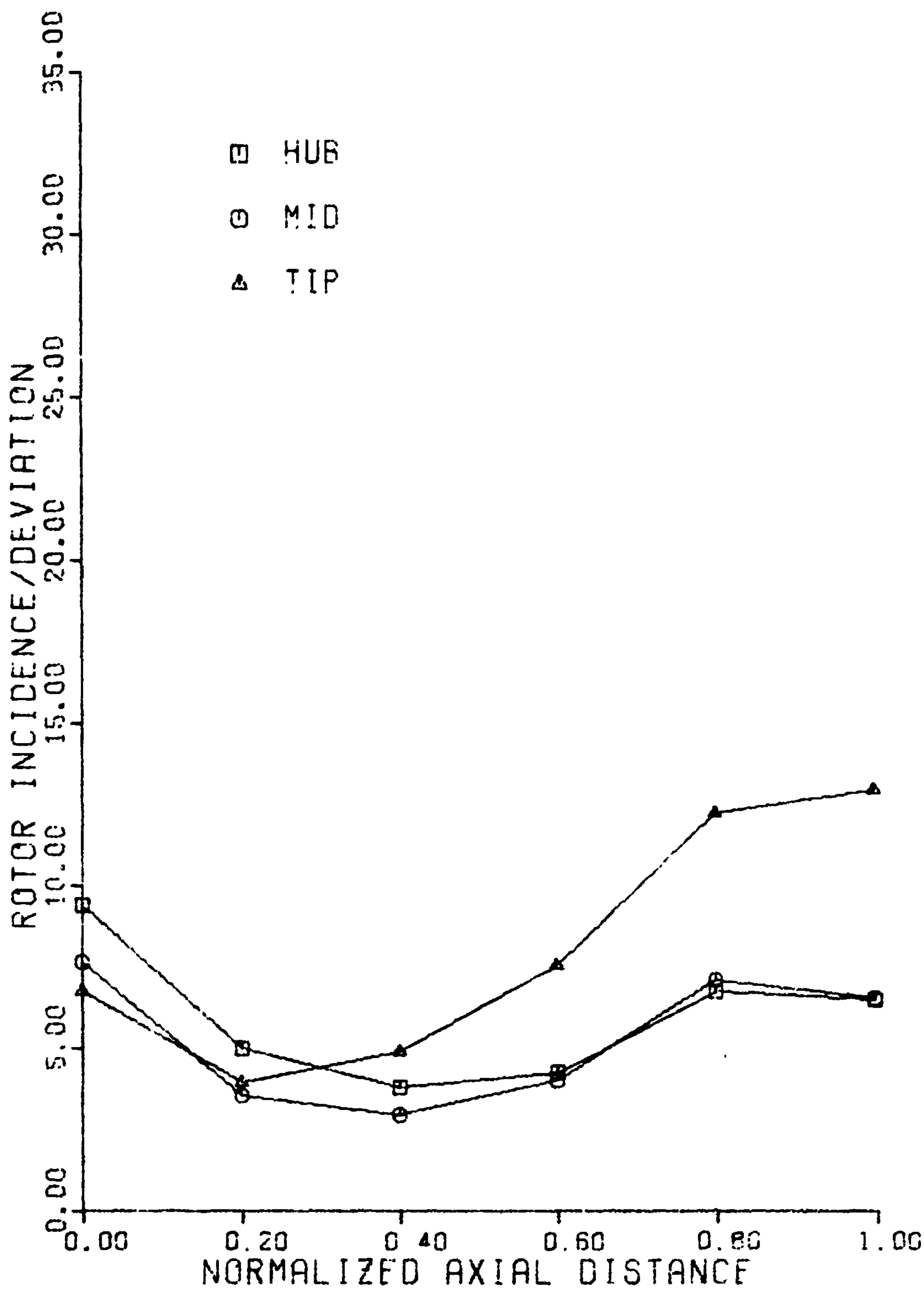


FIGURE 204. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (60% SPEED POINT)

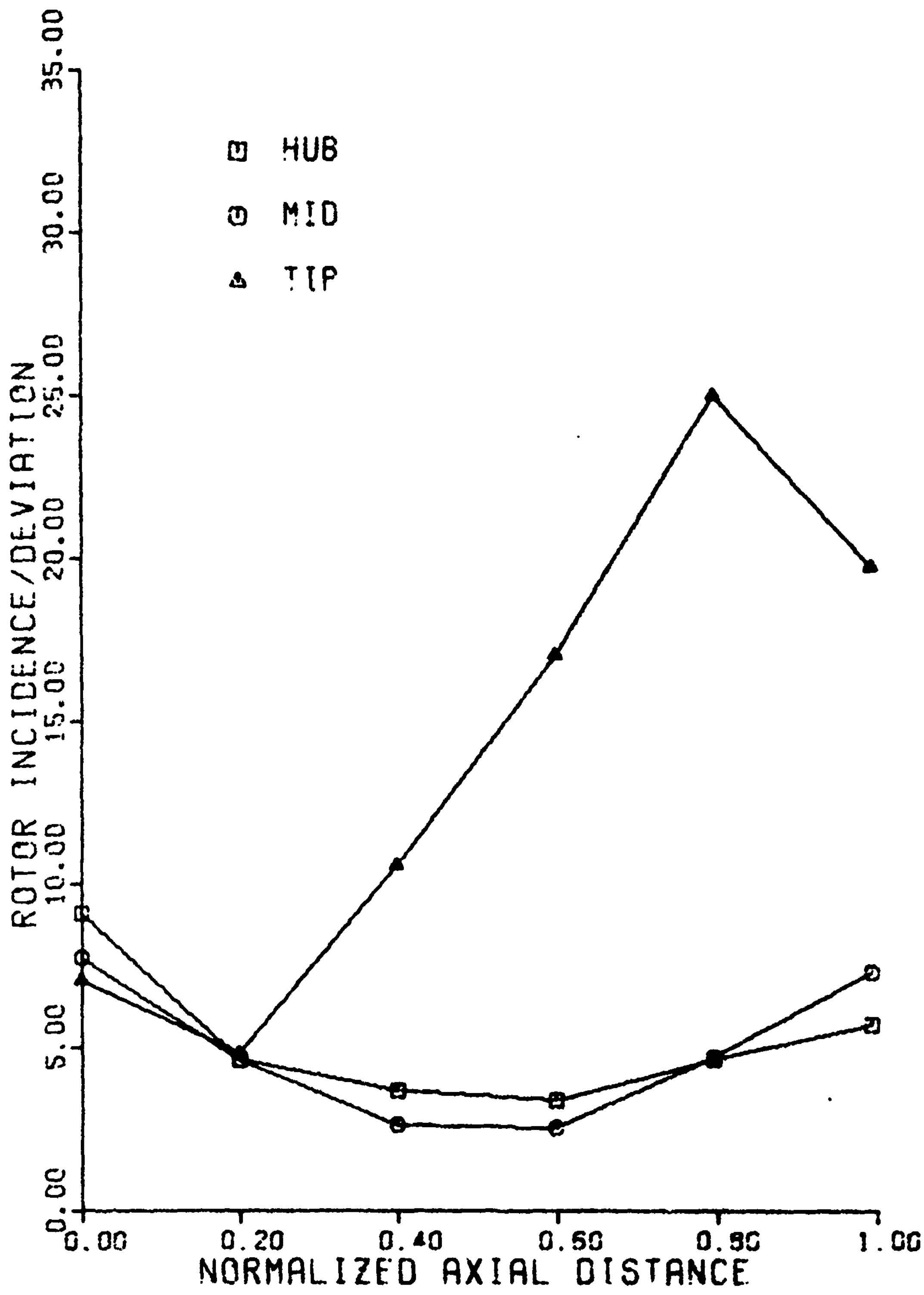


FIGURE 205. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (70% SPEED POINT)

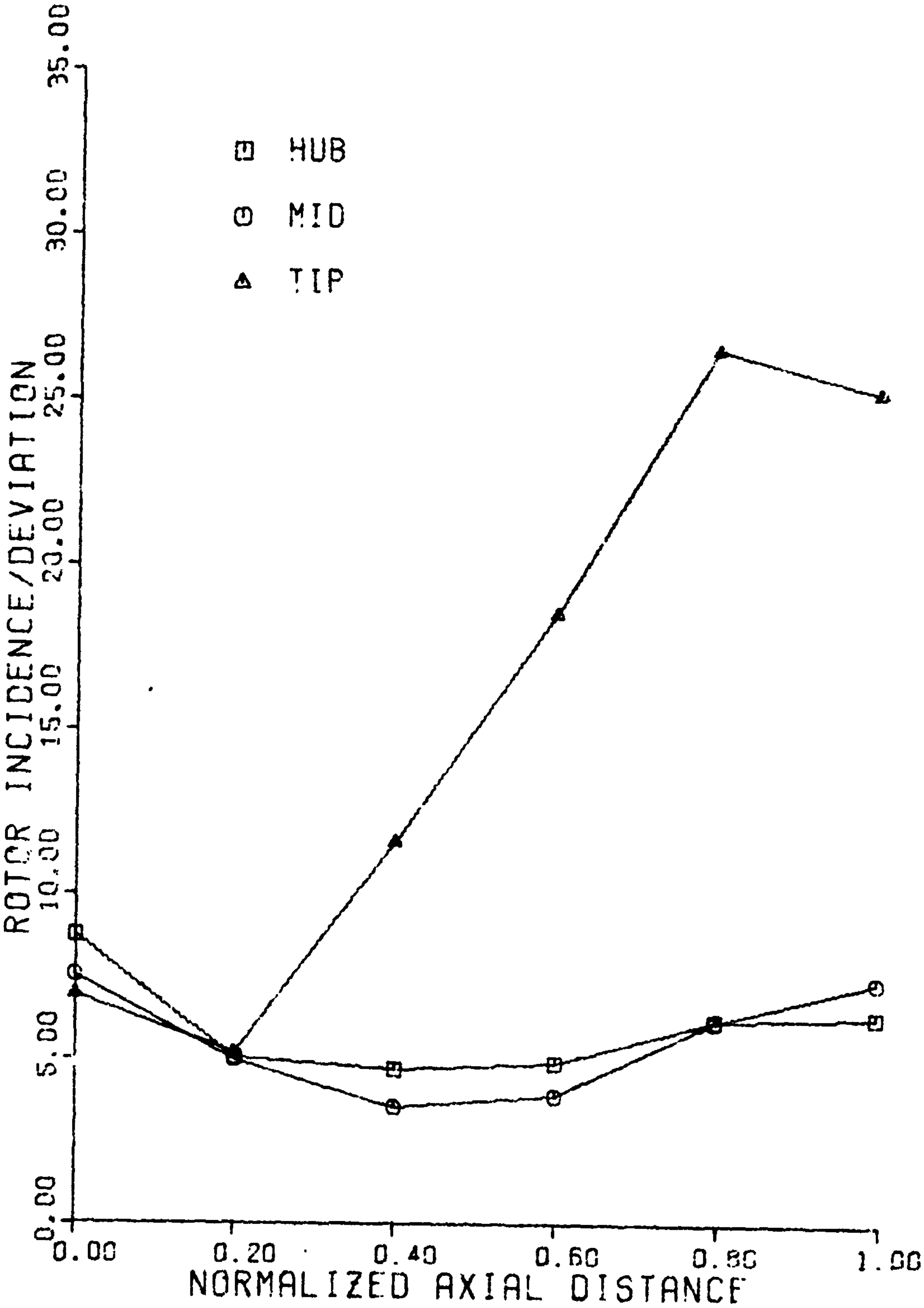


FIGURE 206. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (80% SPEED POINT)

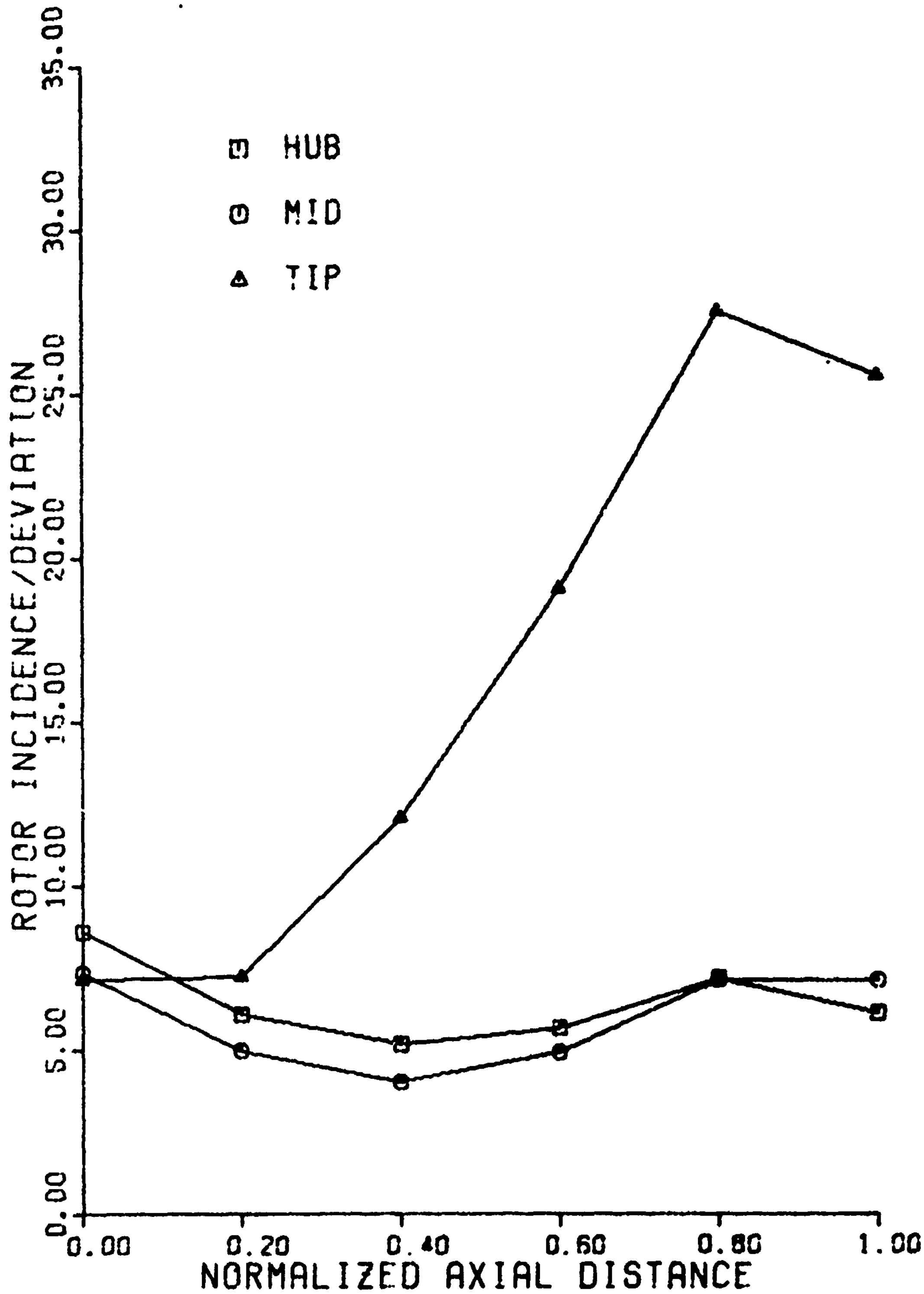


FIGURE 207. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (85% SPEED POINT)

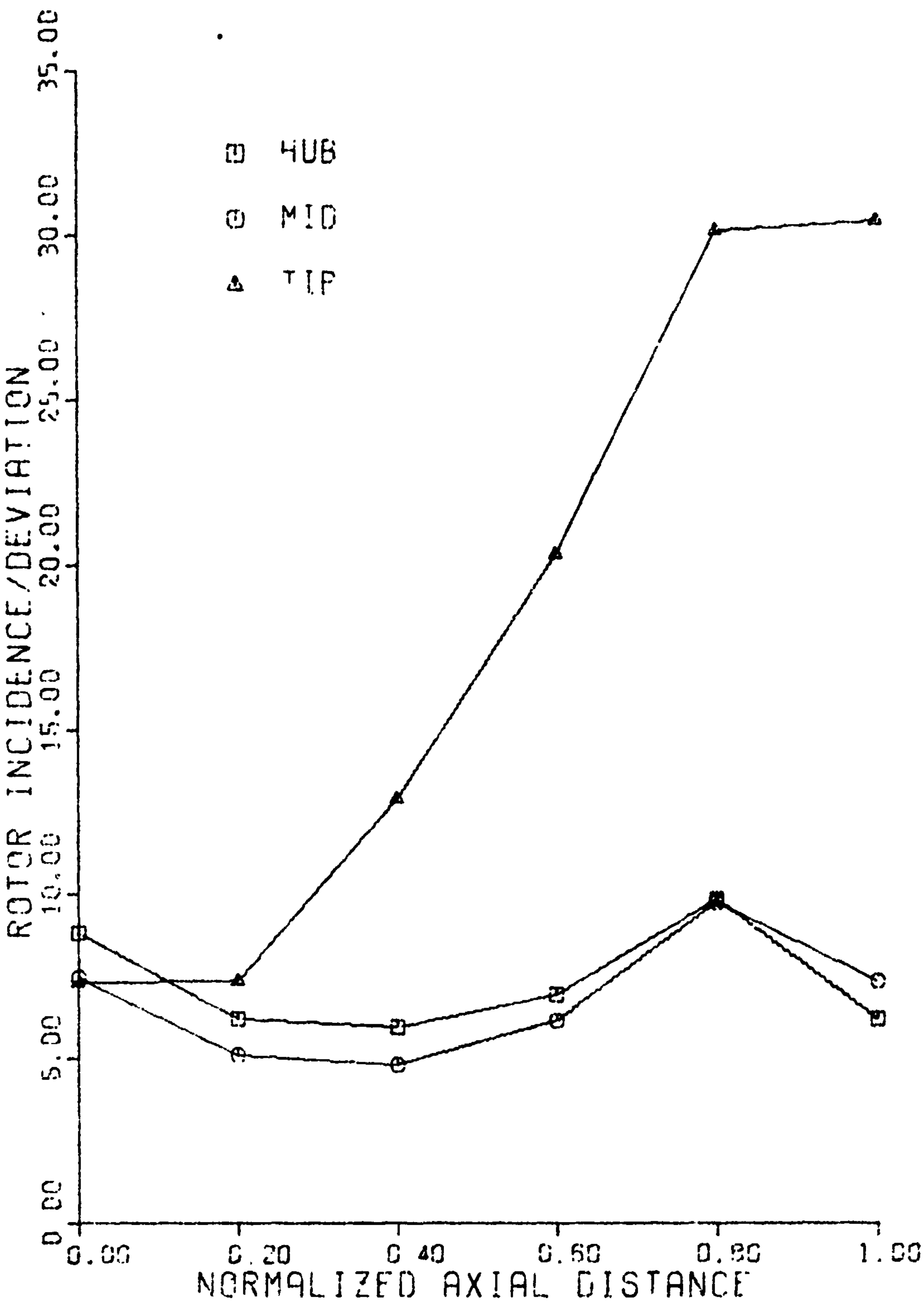


FIGURE 208. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION 90% SPEED POINT)

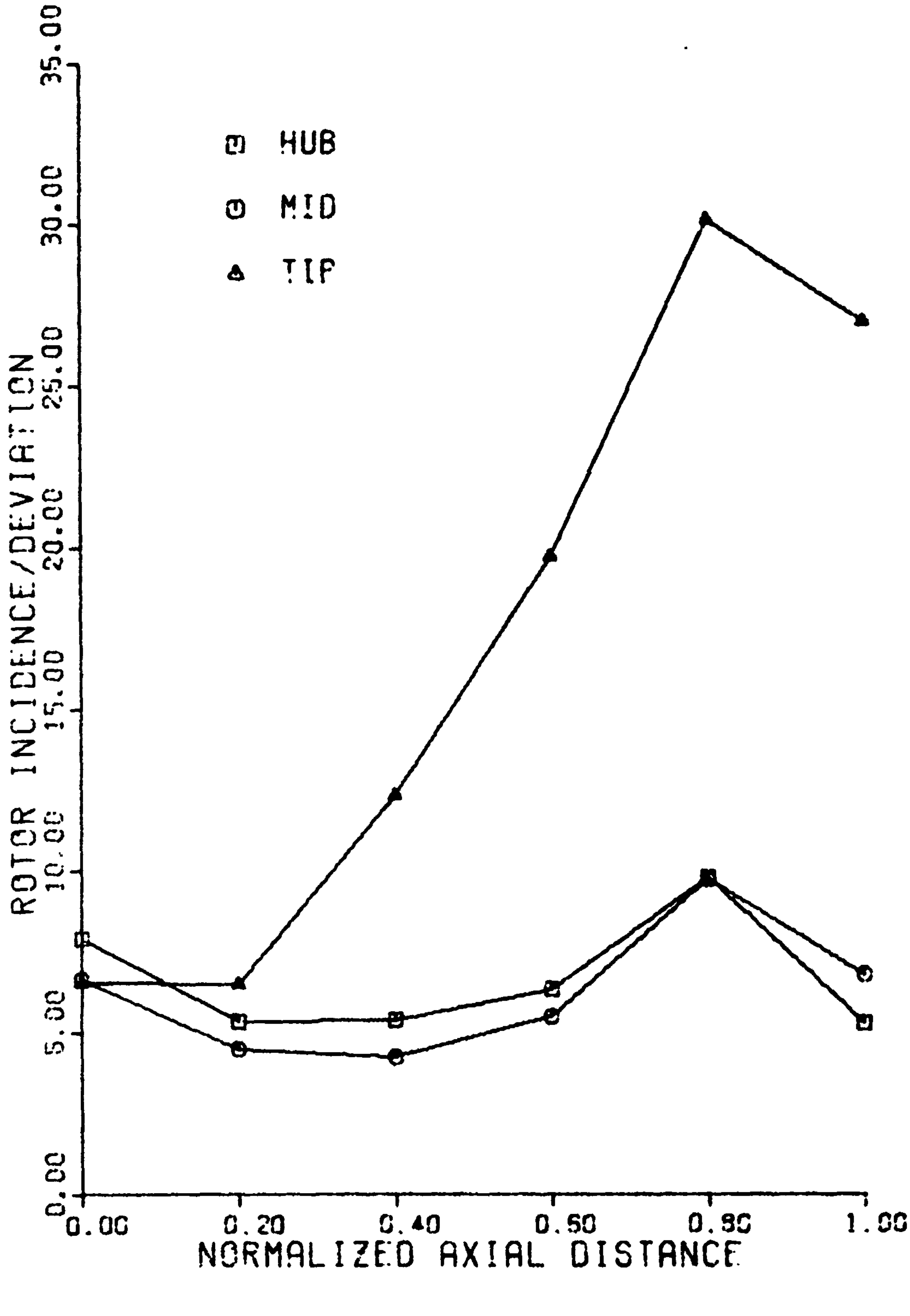


FIGURE 209. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (95% SPEED POINT)

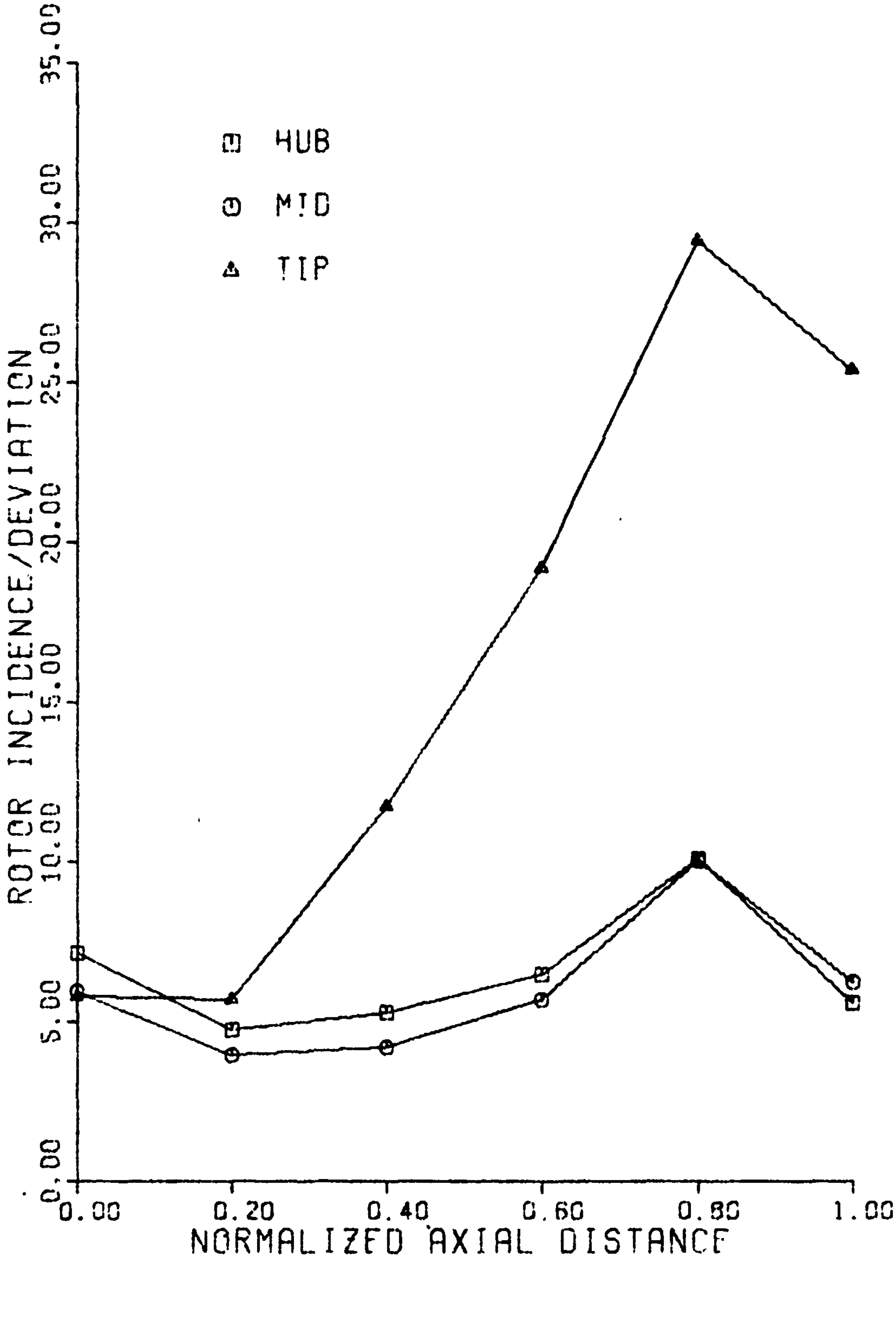


FIGURE 210. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (100% SPEED POINT)

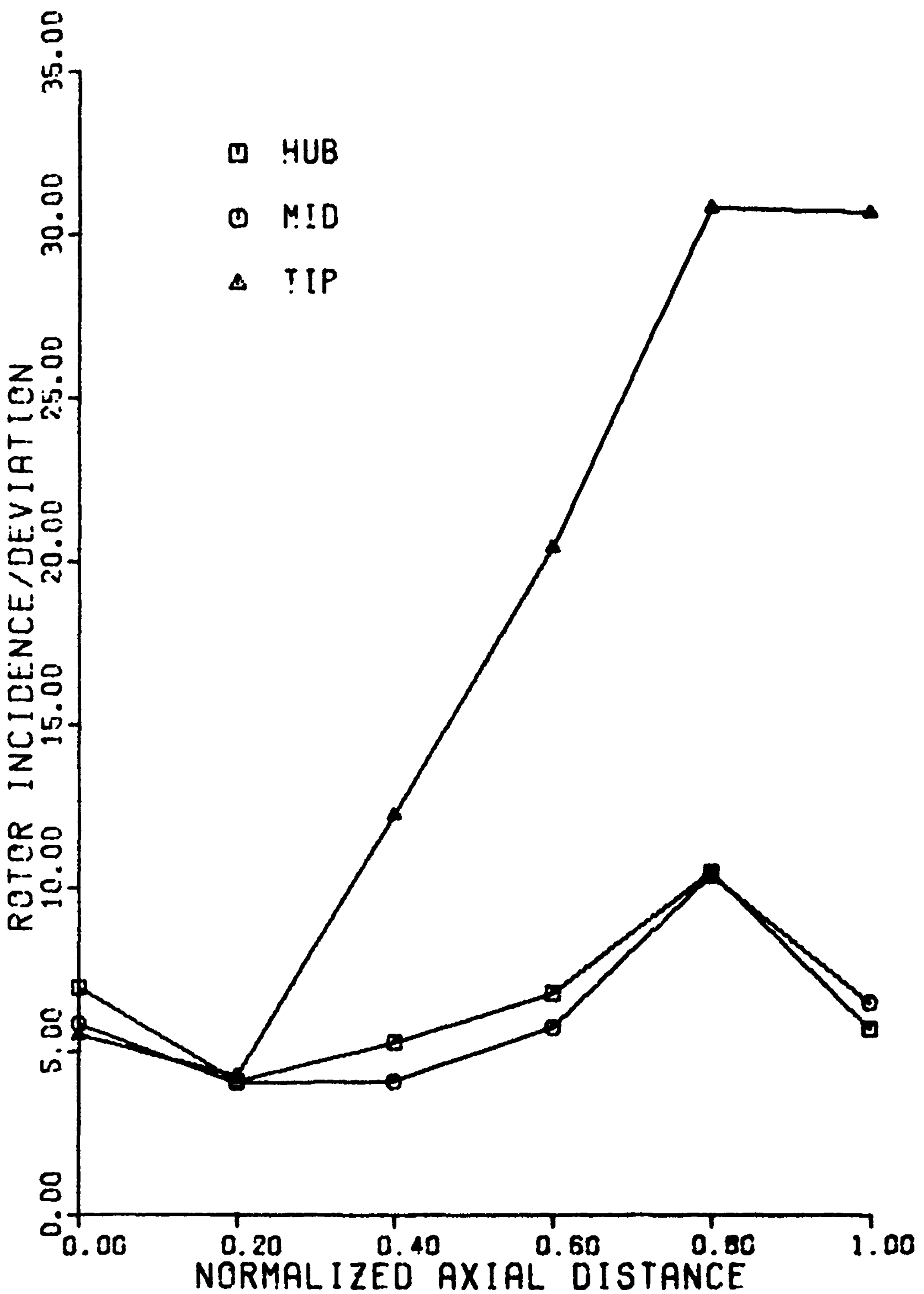


FIGURE 211. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (102% SPEED POINT)

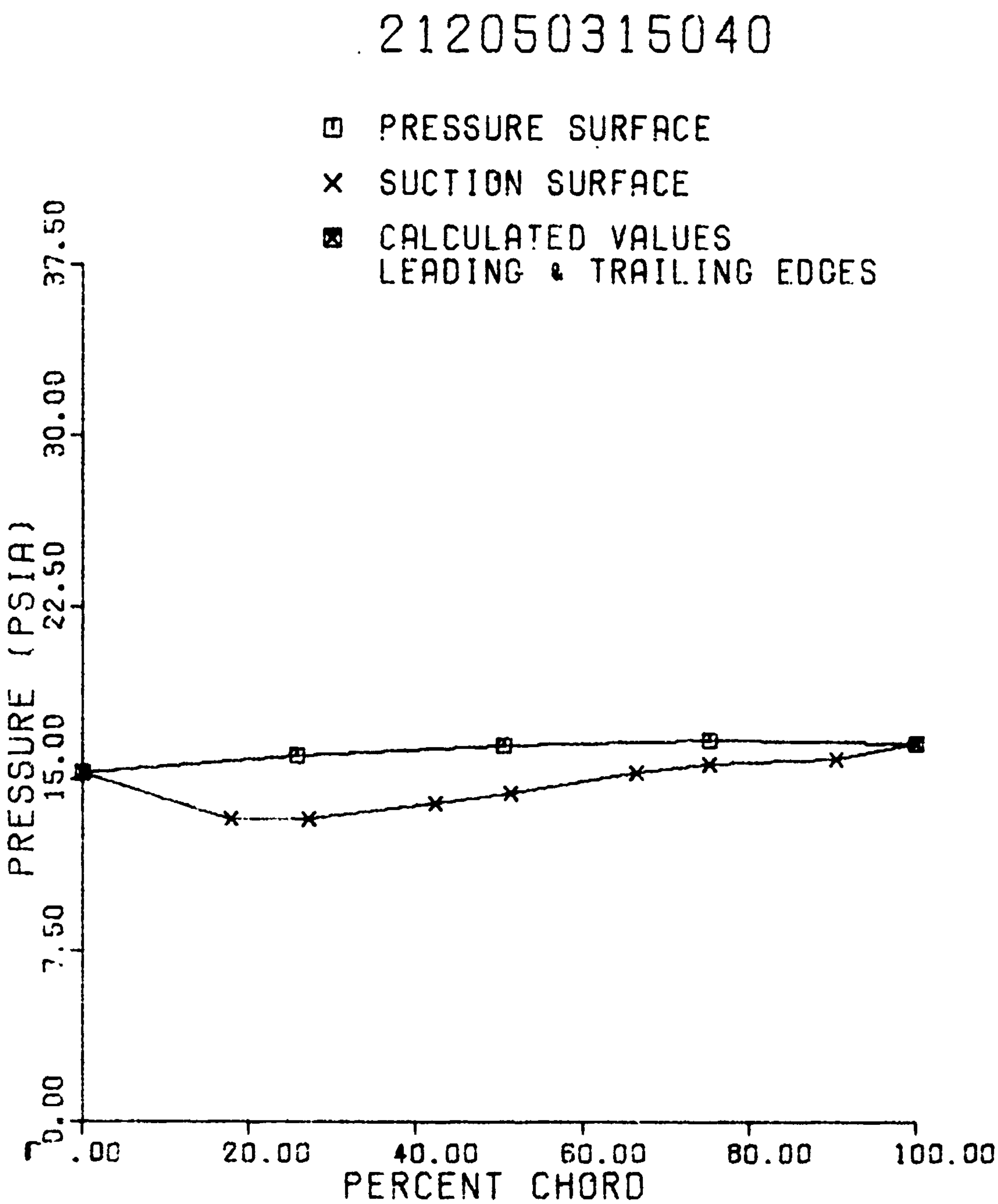


FIGURE 212. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 40% SPEED)

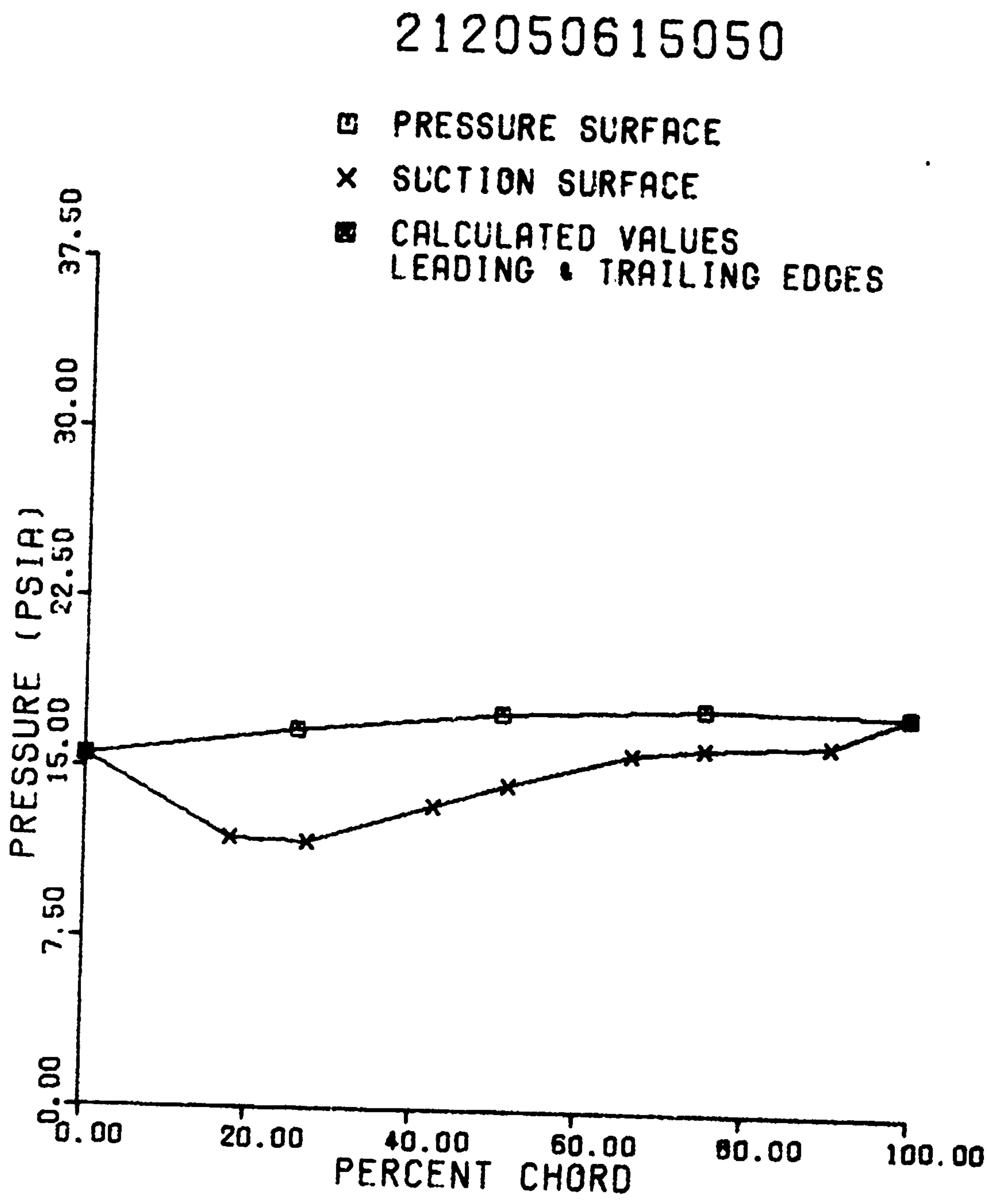


FIGURE 213. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 50% SPEED)

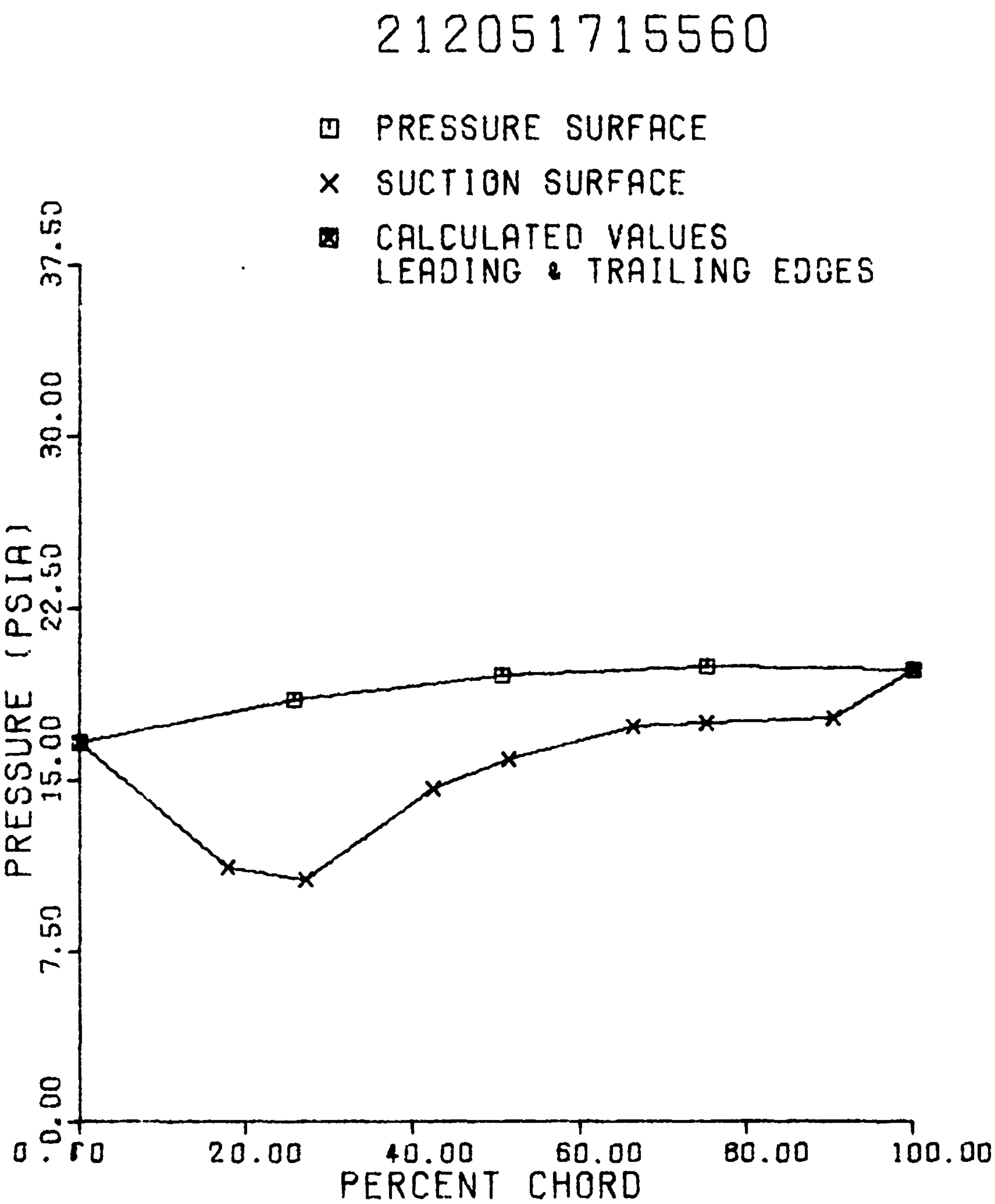


FIGURE 214. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 60% SPEED)

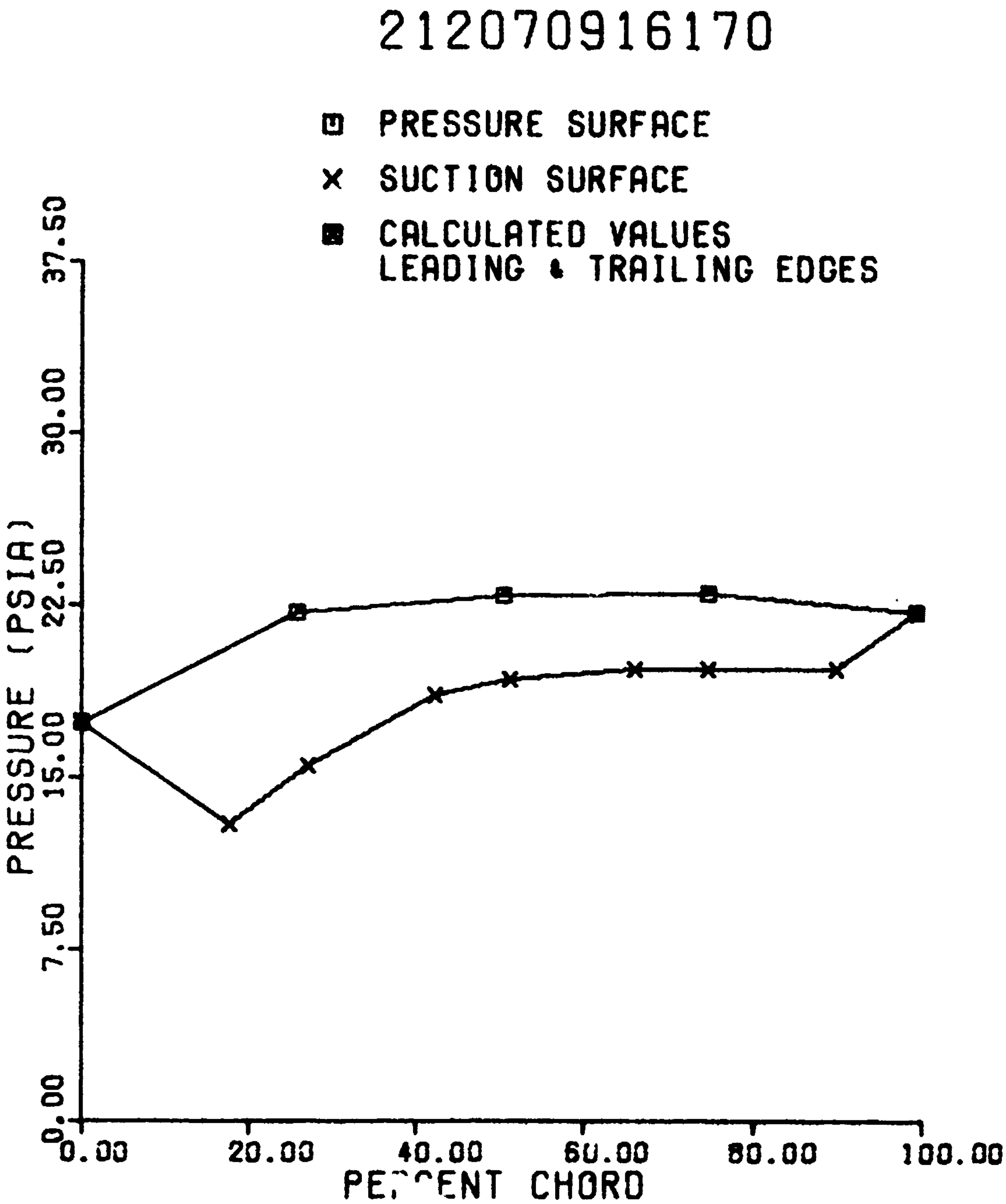


FIGURE 215. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 70% SPEED)

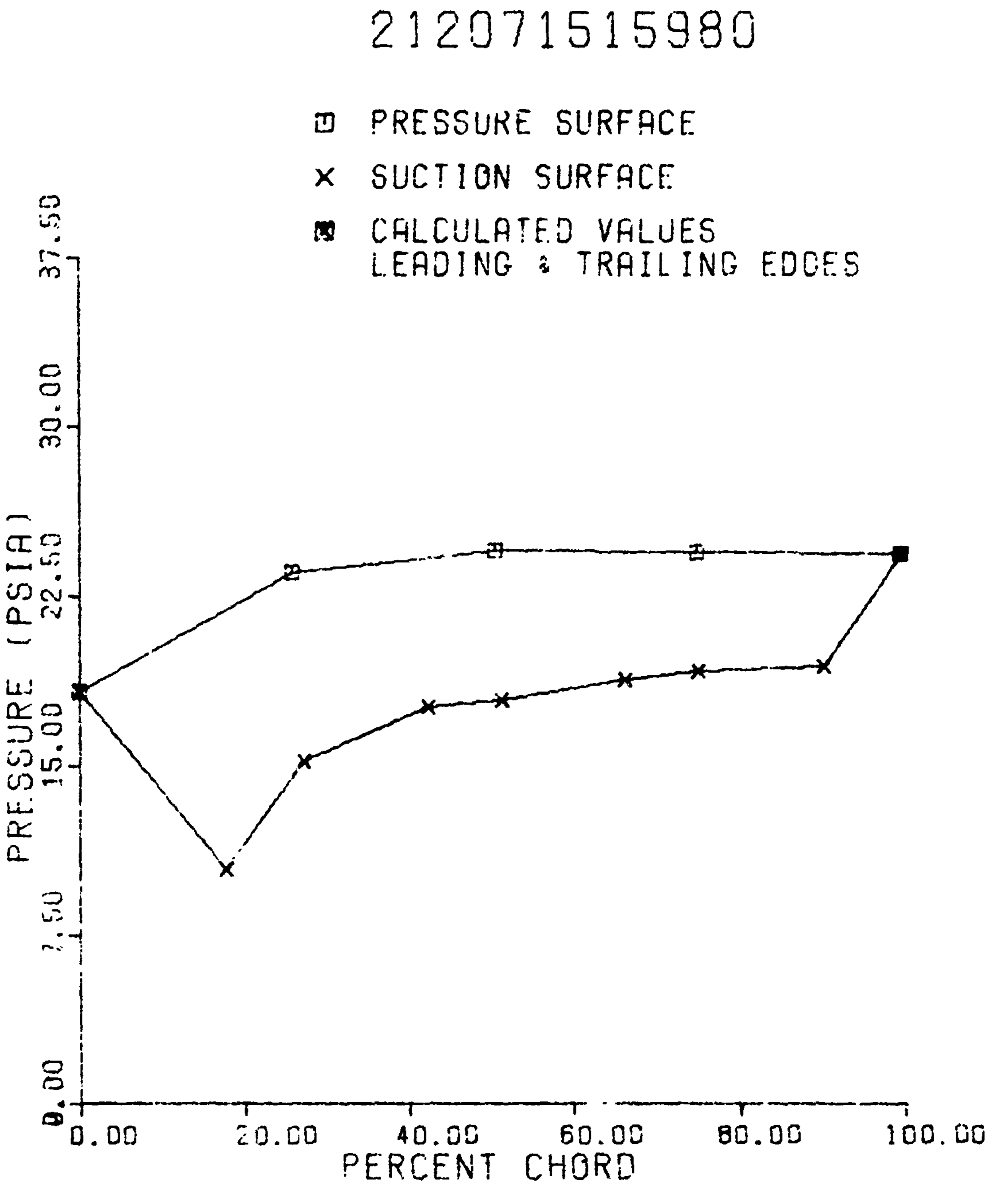


FIGURE 216. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 80% SPEED)

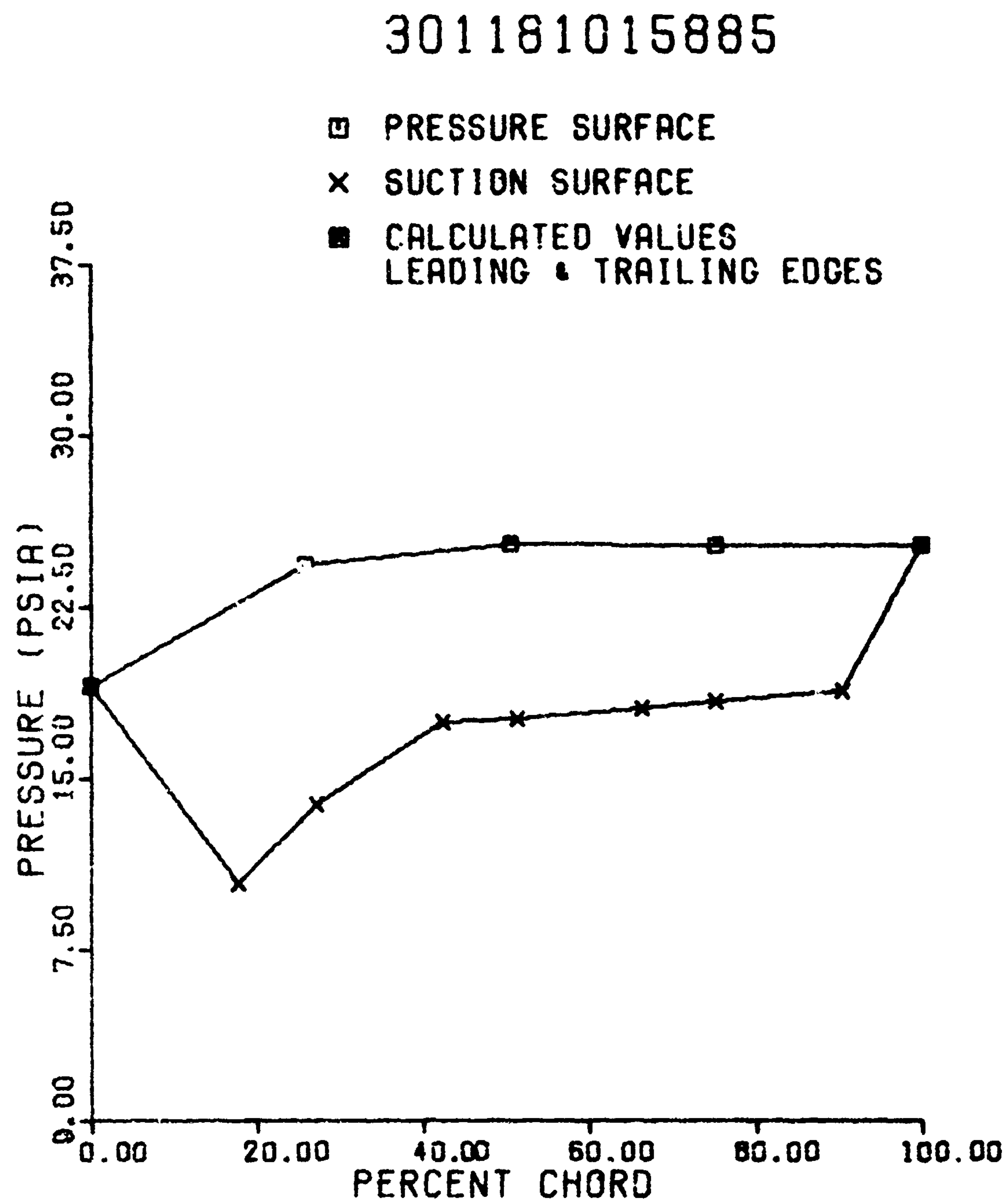


FIGURE 217. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 85% SPEED)

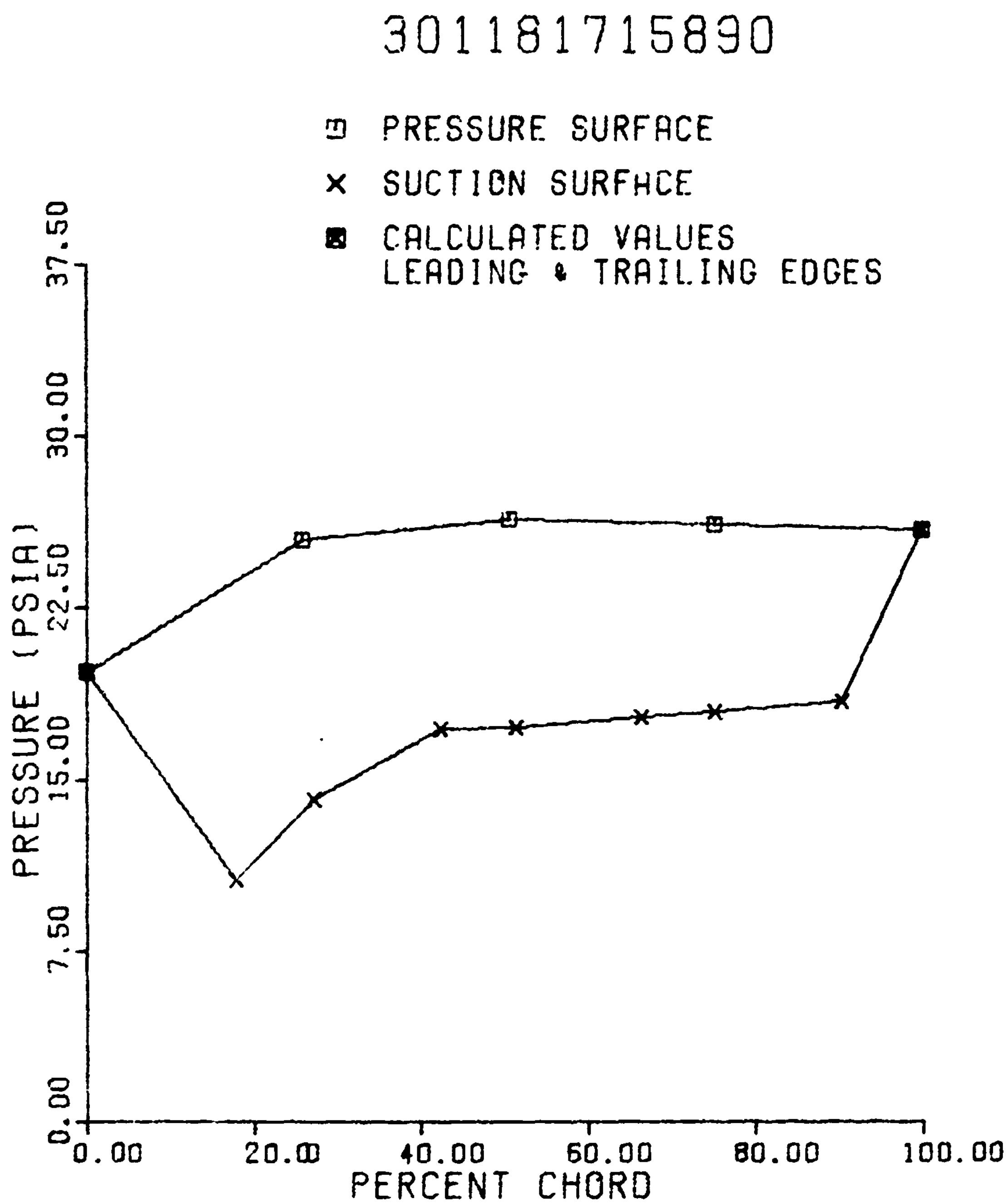


FIGURE 218. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 90% SPEED)

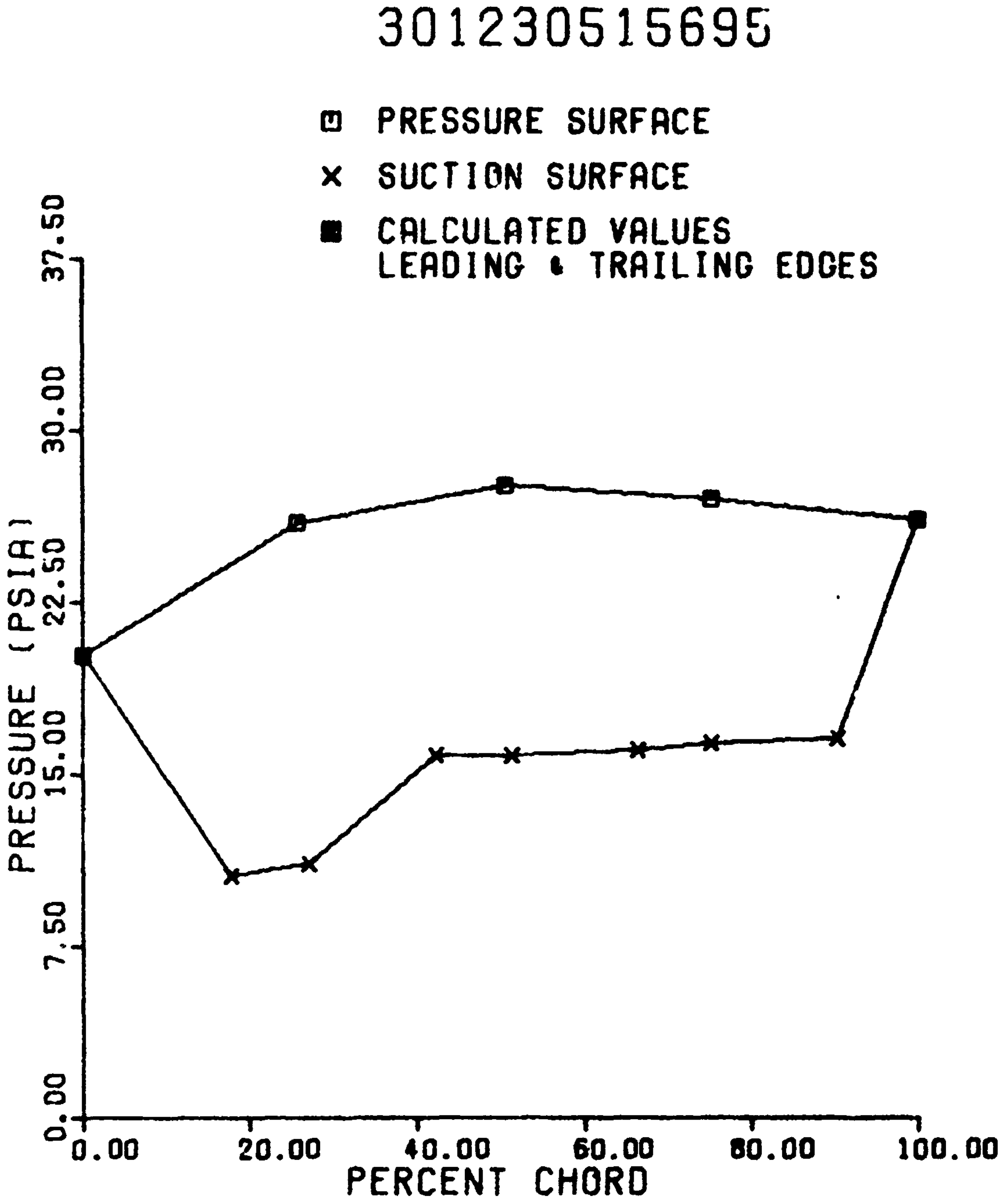


FIGURE 219. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 95% SPEED)

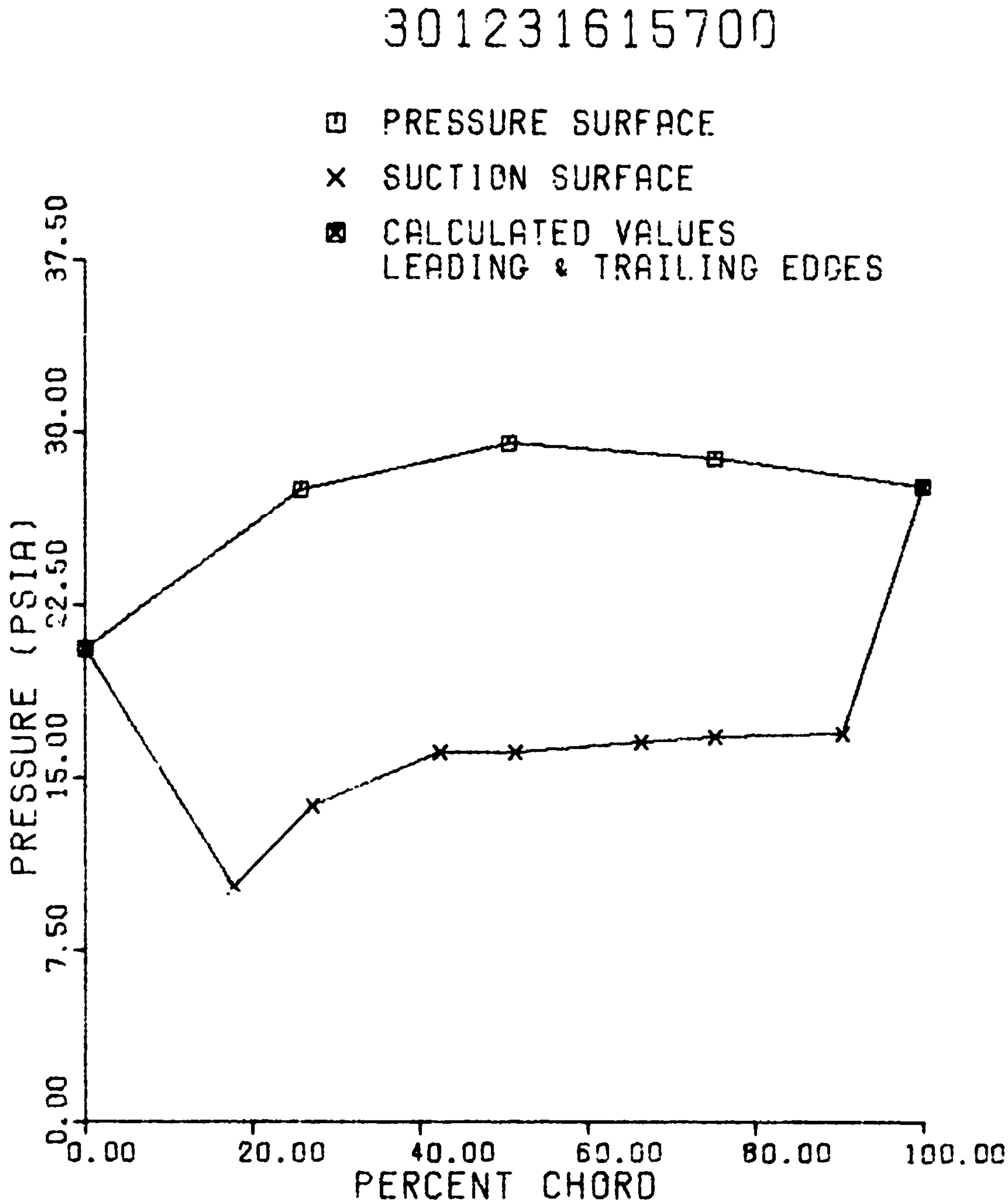


FIGURE 220. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 100% SPEED)

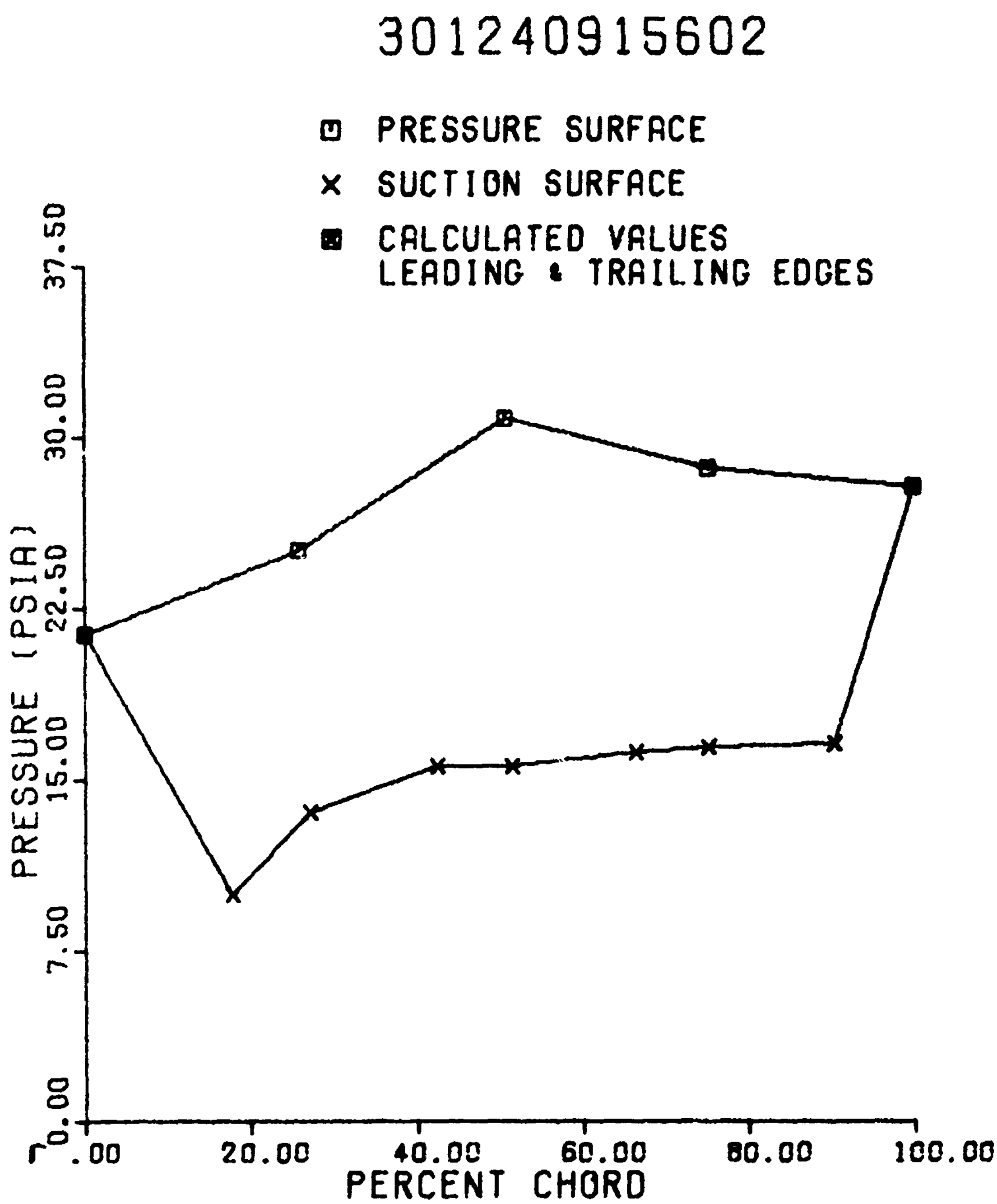


FIGURE 221. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 102% SPEED)

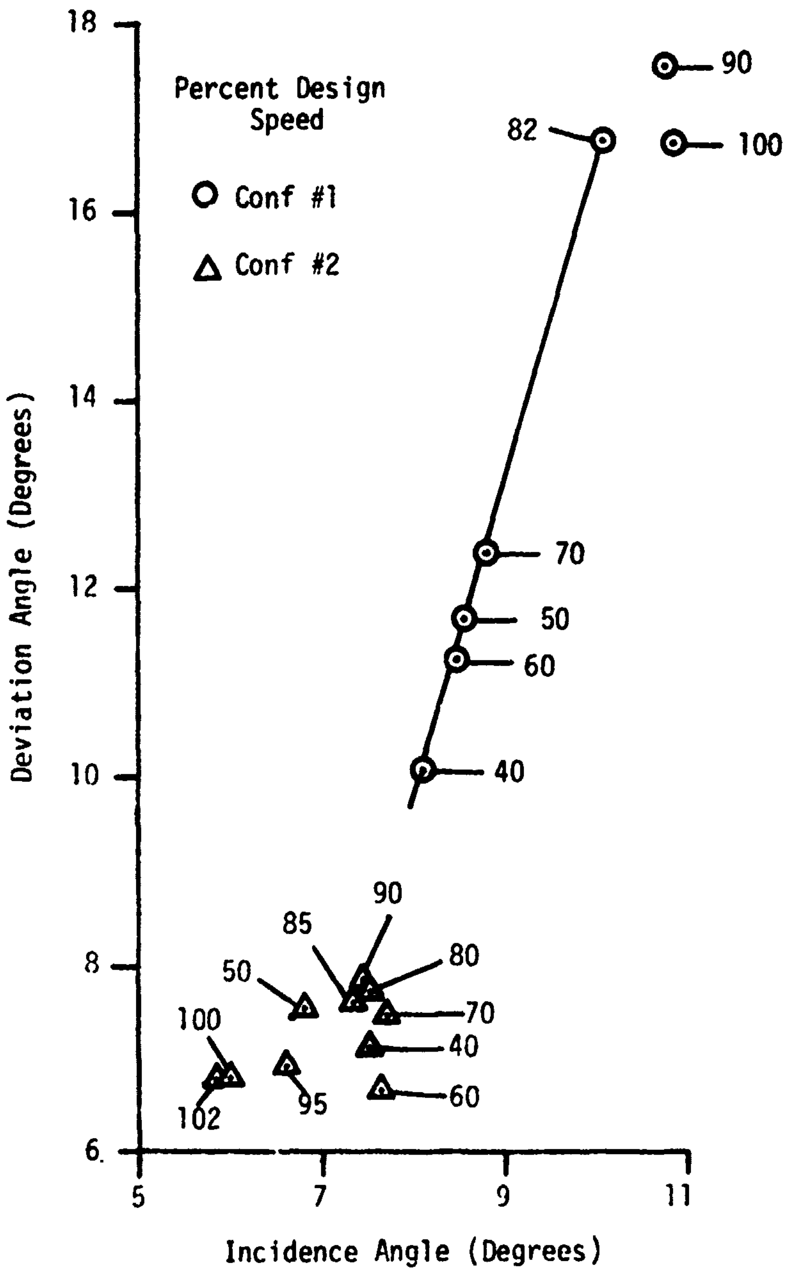


FIGURE 222. ROTOR MID-RADIUS DEVIATION VS INCIDENCE ANGLE

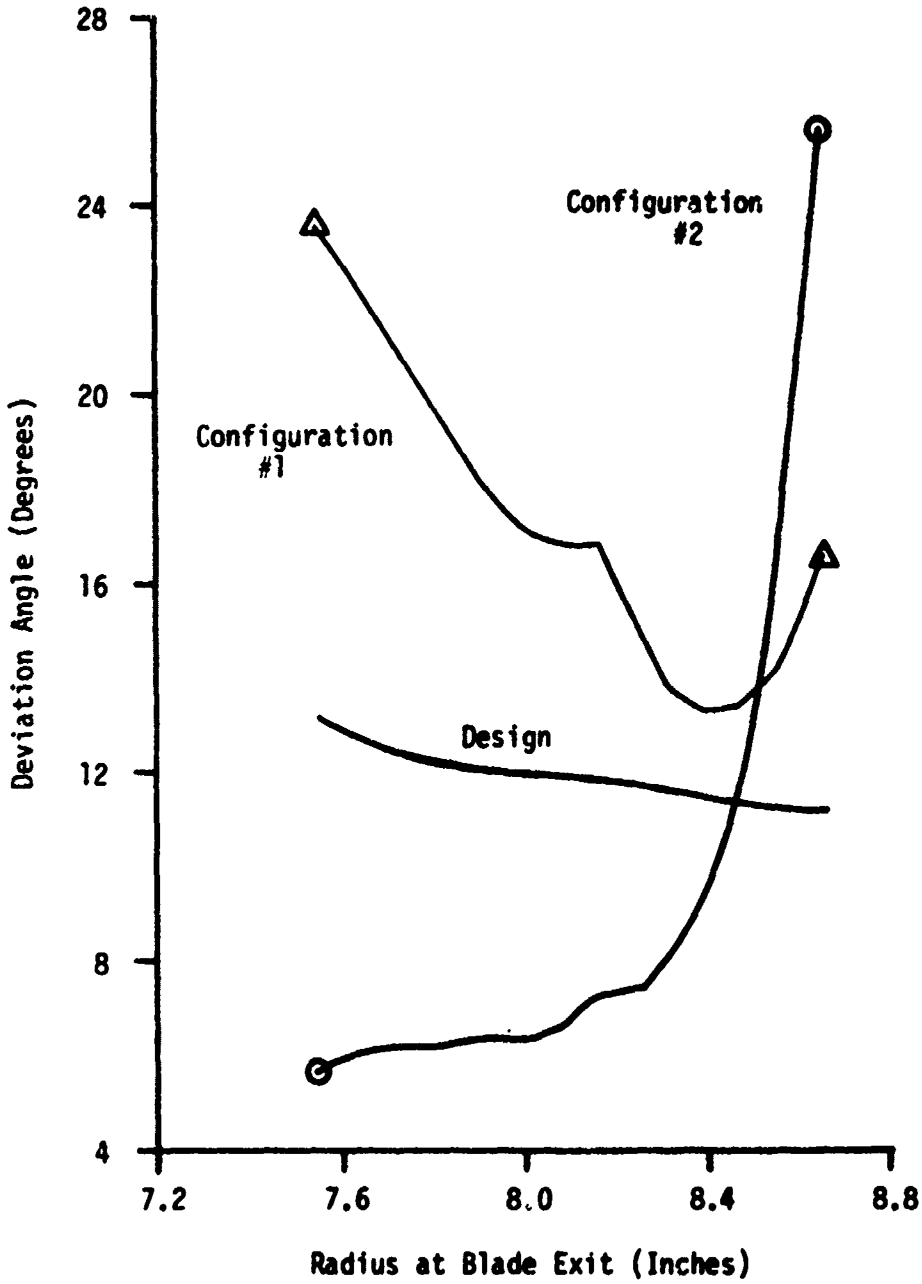


FIGURE 223. ROTOR DEVIATION ANGLE DISTRIBUTION

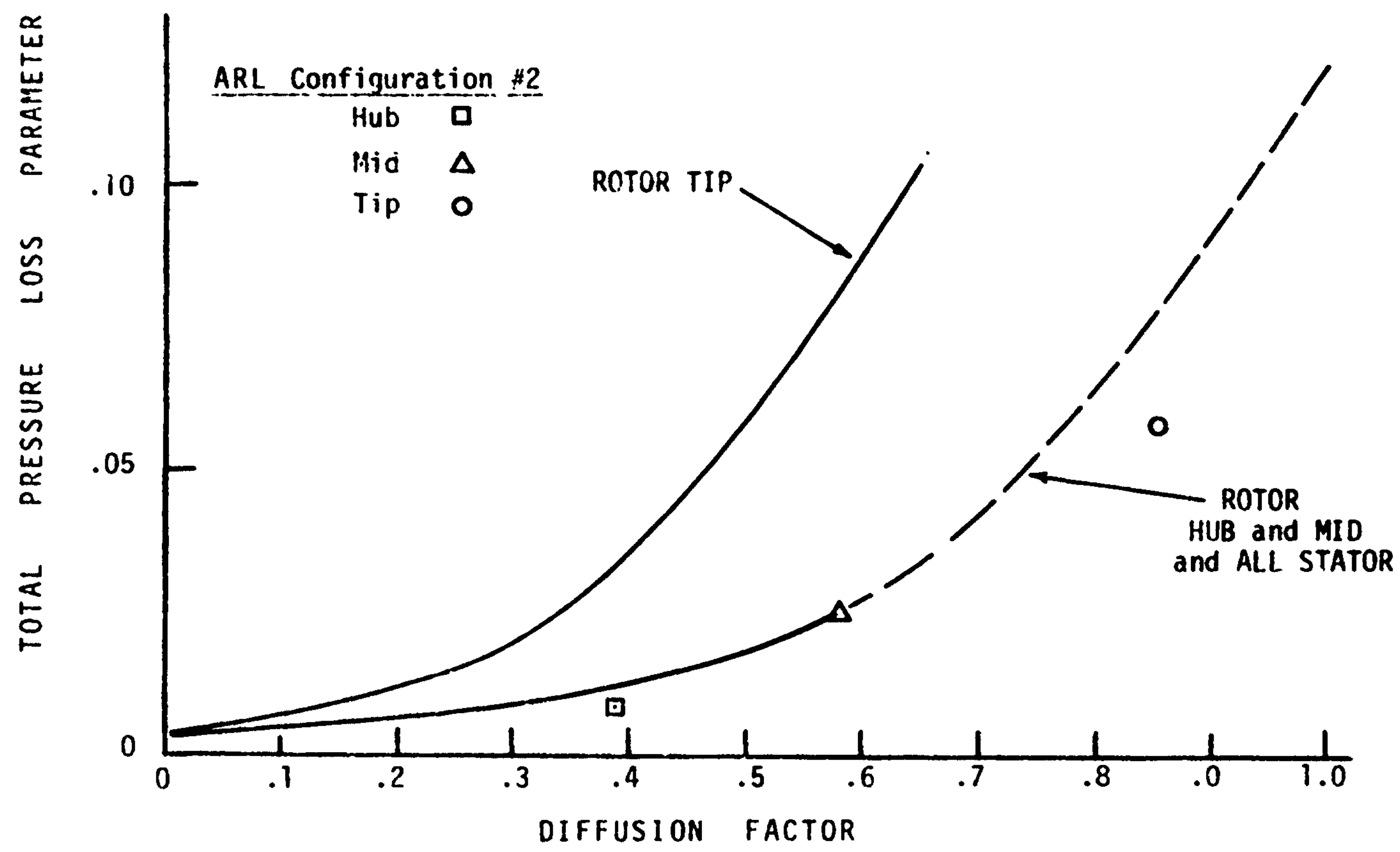


FIGURE 224. NACA COMPRESSOR LOSS CORRELATION WITH ARL CONFIGURATION #2 SUPERIMPOSED

APPENDIX A

PHASE II WITHIN-BLADE ANALYSES (COMPUTER PRINTOUTS)

This appendix presents the aerodynamic results (in the form of computer printouts) of the Phase II within-blade analyses for the ten test points selected for that analysis. The printout of input data which precedes the material presented herein has been removed in order to keep the number of pages to a minimum. The input data used in each of these analyses are presented in Appendix B.

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1. TEST POINT 212050315040 (40%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	137.58	0.00	137.53	518.500	517.119	14.693	14.541	.1232	0.00	20.33	0.000	.0757
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	517.118	14.693	14.541	.1232	0.00	19.73	0.000	.0757
3	[illegible]	[illegible]	[illegible]	137.58	518.550	517.118	14.693	14.541	.1232	0.00	18.53	0.000	.0757
4	[illegible]	[illegible]	[illegible]	137.53	518.558	517.118	14.693	14.541	.1232	0.00	17.31	0.000	.0757
5	[illegible]	[illegible]	0.00	[illegible]	518.588	517.118	14.693	14.541	.1232	0.00	16.09	0.000	.0757
6	[illegible]	[illegible]	0.00	[illegible]	518.583	517.118	14.693	14.541	.1232	0.00	14.97	0.000	.0757
7	[illegible]	137.58	[illegible]	137.53	518.538	517.115	14.693	14.541	.1232	0.00	13.65	0.000	.0757
8	7.1515	[illegible]	0.00	137.48	518.5[illegible]	517.118	14.693	14.541	.1232	0.00	12.44	0.000	.0757
9	7.3027	137.55	0.00	137.58	518.603	517.118	14.693	14.541	.1232	0.00	11.23	0.000	.0757
10	7.4531	[illegible]	0.00	137.53	518.555	517.118	14.693	14.541	.1232	0.00	10.03	0.000	.0757
11	7.6031	137.56	0.00	137.58	518.558	517.118	14.693	14.541	.1232	0.00	8.86	0.000	.0757
12	7.7527	[illegible]	0.00	137.58	518.588	517.116	14.693	14.541	.1232	0.00	7.71	0.000	.0757
13	7.9015	137.55	0.00	137.53	518.059	517.118	14.693	14.541	.1232	0.00	6.59	0.000	.0757
14	8.0497	137.53	0.00	137.58	518.558	517.115	14.693	14.541	.1232	0.00	5.51	0.000	.0757
15	8.1974	[illegible]	0.00	137.58	518.059	517.118	14.693	14.541	.1232	0.00	4.48	0.000	.0757
16	8.3430	137.58	0.00	137.58	518.538	517.118	14.693	14.541	.1232	0.00	3.51	0.000	.0757
17	8.4894	137.55	0.00	137.53	518.538	517.118	14.693	14.541	.1232	0.00	2.62	0.000	.0757
18	8.6443	137.55	0.00	137.53	518.558	517.118	14.693	14.541	.1232	0.00	1.80	0.000	.0757
19	8.7932	137.53	0.00	137.53	518.549	517.118	14.693	14.541	.1232	0.00	1.08	0.000	.0757
20	8.9415	137.58	0.00	137.58	518.538	517.118	14.693	14.541	.1232	0.00	.48	0.000	.0757
21	9.0930	137.55	0.00	137.53	518.033	517.118	14.693	14.541	.1232	0.00	0.00	0.000	.0757

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3745	148.74	0.00	148.74	518.588	516.353	14.693	14.315	.1333	0.00	20.83	-203.758	.0756
2	6.5133	149.41	0.00	149.41	518.538	516.337	14.693	14.313	.1339	0.00	19.66	-134.389	.0756
3	6.6517	150.01	0.00	150.01	518.538	516.822	14.693	14.312	.1344	0.00	18.33	-107.736	.0755
4	6.7335	150.55	0.00	150.55	518.658	516.808	14.693	14.310	.1349	0.00	17.08	-92.645	.0755
5	6.9245	151.05	0.00	151.05	518.588	516.790	14.693	14.309	.1353	0.00	15.84	-81.334	.0755
6	7.0595	151.44	0.00	151.44	518.635	516.765	14.693	14.308	.1357	0.00	14.60	-73.079	.0755
7	7.1941	151.85	0.00	151.[illegible]	518.608	516.776	14.693	14.307	.1361	0.00	13.34	-65.124	.0755
8	7.3243	152.14	0.00	152.14	518.688	516.765	14.693	14.306	.1363	0.00	12.08	-57.773	.0755
9	7.4515	152.35	0.00	152.35	518.553	516.753	14.693	14.306	.1365	0.00	10.83	-51.306	.0755
10	7.5947	152.45	0.00	152.45	518.538	516.751	14.693	14.305	.1365	0.00	9.58	-44.843	.0755
11	7.7273	152.43	0.00	152.43	518.555	516.751	14.693	14.306	.1365	0.00	8.34	-39.324	.0755
12	7.8599	152.29	0.00	152.29	518.608	516.765	14.693	14.306	.1363	0.00	7.12	-34.446	.0755
13	7.9942	152.01	0.00	152.01	518.538	516.772	14.693	14.307	.1362	0.00	5.92	-30.173	.0755
14	8.1279	151.57	0.00	151.57	518.655	516.753	14.693	14.308	.1353	0.00	4.75	-26.451	.0755
15	8.2521	150.47	0.00	150.47	518.635	516.738	14.693	14.309	.1353	0.00	3.62	-23.215	.0755
16	8.3971	150.13	0.00	150.13	518.680	516.817	14.693	14.311	.1345	0.00	2.53	-20.397	.0755
17	8.5330	149.22	0.00	149.22	518.686	516.841	14.693	14.314	.1337	0.00	1.50	-17.929	.0756
18	8.6730	148.05	0.00	148.05	518.688	516.870	14.693	14.316	.1326	0.00	.53	-15.754	.0756
19	8.8033	146.08	0.00	146.08	518.636	516.904	14.693	14.320	.1314	0.00	-.37	-13.821	.0756
20	8.9482	145.07	0.00	145.07	518.688	516.943	14.693	14.324	.1300	0.00	-1.16	-12.086	.0756
21	9.0990	143.21	0.00	143.21	518.558	516.957	14.693	14.328	.1283	0.00	-1.91	-10.518	.0756

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STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6815	161.22	0.00	161.22	518.688	516.532	14.695	14.483	.1445	0.00	20.54	-83.831	.0754
2	6.7253	162.04	0.00	162.04	518.688	516.511	14.695	14.481	.1452	0.00	19.33	-173.438	.0754
3	6.8432	162.94	0.00	162.94	518.688	516.486	14.695	14.479	.1460	0.00	18.10	-524.767	.0754
4	6.9733	163.90	0.00	163.90	518.688	516.460	14.695	14.476	.1453	0.00	16.86	18057.961	.0754
5	7.0916	164.85	0.00	164.86	518.688	516.434	14.695	14.474	.1473	0.00	15.59	2568.613	.0754
6	7.2126	165.78	0.00	165.79	518.688	516.409	14.695	14.471	.1480	0.00	14.29	-1352.339	.0754
7	7.3328	166.62	0.00	166.62	518.688	516.386	14.695	14.469	.1493	0.00	12.97	-312.649	.0754
8	7.4525	167.35	0.00	167.35	518.688	516.365	14.695	14.467	.1500	0.00	11.63	-145.127	.0754
9	7.5719	167.94	0.00	167.94	518.688	516.349	14.695	14.465	.1505	0.00	10.26	-85.246	.0754
10	7.6911	168.35	0.00	168.35	518.688	516.338	14.695	14.464	.1509	0.00	8.87	-56.746	.0754
11	7.8103	168.53	0.00	168.53	518.688	516.333	14.695	14.464	.1511	0.00	7.47	-40.910	.0754
12	7.9230	168.48	0.00	168.43	518.688	516.334	14.695	14.464	.1510	0.00	6.07	-31.166	.0754
13	8.0434	168.17	0.00	168.17	518.688	516.343	14.695	14.465	.1507	0.00	4.67	-24.741	.0754
14	8.1538	167.57	0.00	167.57	518.688	516.359	14.695	14.466	.1502	0.00	3.28	-20.286	.0754
15	8.2910	166.58	0.00	166.53	518.688	516.384	14.695	14.469	.1494	0.00	1.91	-17.077	.0754
16	8.4133	165.49	0.00	165.49	518.688	516.417	14.695	14.472	.1483	0.00	.57	-14.704	.0754
17	8.5359	164.00	0.00	164.00	518.688	516.458	14.695	14.476	.1470	0.00	-.73	-12.988	.0754
18	8.6622	162.22	0.00	162.22	518.688	516.506	14.695	14.481	.1454	0.00	-1.99	-11.588	.0754
19	8.7333	160.15	0.00	160.15	518.688	516.561	14.695	14.486	.1435	0.00	-3.20	-10.390	.0755
20	8.9135	157.31	0.00	157.31	518.688	516.523	14.695	14.492	.1414	0.00	-4.36	-9.473	.0755
21	9.0500	155.21	0.00	155.21	518.688	516.690	14.695	14.499	.1391	0.00	-5.47	-8.698	.0755

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7530	172.17	0.00	172.17	518.688	516.230	14.695	14.454	.1543	0.00	20.32	-385.054	.0753
2	6.8649	174.00	0.00	174.00	518.688	516.177	14.695	14.446	.1560	0.00	19.24	-387313.253	.0753
3	6.9737	175.84	0.00	175.84	518.688	516.124	14.695	14.443	.1575	0.00	18.10	465.475	.0753
4	7.0915	177.66	0.00	177.65	518.688	516.071	14.695	14.438	.1593	0.00	16.90	286.981	.0753
5	7.2034	179.42	0.00	179.42	518.688	516.019	14.695	14.433	.1609	0.00	15.64	275.575	.0753
6	7.3144	181.10	0.00	181.10	518.688	515.968	14.695	14.428	.1624	0.00	14.31	437.691	.0752
7	7.4240	182.55	0.00	182.55	518.688	515.922	14.695	14.423	.1638	0.00	12.92	-1628.763	.0752
8	7.5341	184.01	0.00	184.01	518.688	515.880	14.695	14.419	.1650	0.00	11.47	-202.521	.0752
9	7.6430	185.14	0.00	185.14	518.688	515.845	14.695	14.416	.1660	0.00	9.96	-94.284	.0752
10	7.7517	185.99	0.00	185.93	518.688	515.819	14.695	14.413	.1668	0.00	8.42	-57.624	.0752
11	7.8592	186.53	0.00	186.53	518.688	515.803	14.695	14.412	.1673	0.00	6.83	-40.131	.0752
12	7.9639	186.72	0.00	186.72	518.688	515.797	14.695	14.411	.1675	0.00	5.23	-30.012	.0752
13	8.0730	186.52	0.00	186.52	518.688	515.803	14.695	14.412	.1673	0.00	3.60	-23.409	.0752
14	8.1877	185.91	0.00	185.91	518.688	515.822	14.695	14.414	.1667	0.00	1.96	-18.778	.0752
15	8.2935	184.86	0.00	184.86	518.688	515.854	14.695	14.417	.1658	0.00	.34	-15.554	.0752
16	8.4135	183.37	0.00	183.37	518.688	515.900	14.695	14.421	.1644	0.00	-1.26	-13.446	.0752
17	8.5241	181.48	0.00	181.49	518.688	515.957	14.695	14.427	.1627	0.00	-2.79	-12.127	.0752
18	8.6336	179.25	0.00	179.25	518.688	516.023	14.695	14.433	.1607	0.00	-4.26	-11.233	.0753
19	8.7572	176.72	0.00	176.72	518.688	516.093	14.695	14.441	.1584	0.00	-5.66	-10.639	.0753
20	8.8773	173.95	0.00	173.95	518.688	516.179	14.695	14.449	.1559	0.00	-7.00	-10.298	.0753
21	9.0000	171.00	0.00	171.00	518.688	516.263	14.695	14.457	.1533	0.00	-8.25	-10.317	.0753

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	0.070	-70.210	9.343	0.0000	480.3	.4574	510.24	16.683	537.815	1.000	0.000	1.0000	1.0000
2	-61.311	0.236	-70.334	9.083	0.0000	488.5	.4649	518.56	16.755	538.471	1.000	0.000	1.0000	1.0000
3	-61.573	0.373	-70.[illegible]	8.924	0.0000	496.[illegible]	.47[illegible]	525.[illegible]	16.827	539.132	1.000	0.000	1.0000	1.0000
4	-62.038	[illegible].416	-70.[illegible]	[illegible]	0.0000	504.[illegible]	[illegible]	534.[illegible]	16.900	539.799	1.000	0.000	1.0000	1.0000
5	-62.307	0.393	-7[illegible]	8.[illegible]1	0.0000	512.[illegible]	.4869	543.06	16.973	540.470	1.000	0.000	1.0000	1.0000
6	-62.536	[illegible].935	-71.315	8.[illegible]8	0.0000	520.[illegible]	.4941	551.03	17.048	541.146	1.000	0.000	1.0000	1.0000
7	-62.854	[illegible].497	-71.329	7.973	0.0000	528.[illegible]	.5013	559.00	17.123	541.827	1.000	0.000	1.0000	1.0000
8	-63.135	[illegible].811	-71.[illegible]	7.[illegible]1	0.0000	536.1	.5083	566.81	17.199	542.514	1.000	0.000	1.0000	1.0000
9	-63.419	[illegible]	-71.[illegible]	[illegible]	0.0000	[illegible]	.5152	574.92	17.277	543.209	1.000	0.000	1.0000	1.0000
10	-63.715	[illegible].914	-71.309	[illegible]	0.0000	551.8	.5226	582.11	17.355	543.910	1.000	0.000	1.0000	1.0000
11	-64.026	[illegible].770	-71.527	7.527	0.0000	559.3	[illegible]	589.61	17.435	544.621	1.000	0.000	1.0000	1.0000
12	-64.359	.941	-71.774	7.41[illegible]	0.0000	567.1	.5334	597.41	17.516	545.343	1.000	0.000	1.0000	1.0000
13	-64.713	-.745	-72.022	7.3[illegible]	0.0000	574.[illegible]	.5420	604.32	17.599	546.078	1.000	0.000	1.0000	1.0000
14	-65.092	-2.293	-72.303	7.1[illegible]	0.0000	582.6	.5485	611.57	17.683	546.827	1.000	0.000	1.0000	1.0000
15	-65.499	-3.533	-72.717	7.11[illegible]	0.0000	590.[illegible]	.5549	618.77	17.773	547.592	1.000	0.000	1.0000	1.0000
16	-65.934	-5.320	-72.995	7.031	0.0000	598.5	.5613	625.94	17.860	548.378	1.000	0.000	1.0000	1.0000
17	-66.394	-6.412	-73.343	6.949	0.0000	606.[illegible]	.5677	633.13	17.952	549.185	1.000	0.000	1.0000	1.0000
18	-66.857	-7.097	-73.745	6.978	0.0000	614.[illegible]	.5742	640.38	18.047	550.016	1.000	0.000	1.0000	1.0000
19	-67.345	-7.729	-74.167	6.821	0.0000	623.2	.5807	647.73	18.145	550.875	1.000	0.000	1.0000	1.0000
20	-67.828	-8.504	-74.60[illegible]	6.777	0.0000	631.7	.5874	655.21	18.249	551.763	1.000	0.000	1.0000	1.0000
21	-68.[illegible]	-9.537	-75.[illegible]	6.734	0.0000	640.4	.5942	662.56	18.356	552.684	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8973	201.13	81.13	216.83	525.295	521.396	15.333	14.843	.1932	21.98	22.32	6.199	.0771
2	7.0045	203.40	79.39	218.03	525.217	521.269	15.323	14.829	.1947	21.22	20.70	7.498	.0771
3	7.1097	205.79	77.17	219.70	525.183	521.161	15.322	14.817	.1950	20.57	19.42	9.445	.0770
4	7.2134	208.12	75.73	221.48	525.135	521.064	15.314	14.806	.1975	20.00	17.90	12.579	.0770
5	7.3157	210.59	74.53	223.53	525.155	520.992	15.315	14.897	.1995	19.52	16.34	13.070	.0769
6	7.4165	213.28	73.59	225.72	525.155	520.831	15.317	14.890	.2014	19.11	14.74	29.072	.0769
7	7.5153	215.73	73.4[illegible]	227.5[illegible]	525.200	520.694	15.323	14.865	.2034	18.79	13.11	58.212	.0769
8	7.6143	217.36	73.05	229.90	525.253	520.571	15.324	14.881	.2052	18.53	11.45	268.941	.0769
9	7.7124	219.33	72.73	231.05	525.312	520.46[illegible]	15.325	14.878	.2067	18.31	9.77	-166.395	.0769
10	7.8094	221.40	72.73	233.05	525.394	520.399	15.331	14.876	.2080	18.19	8.07	-81.924	.0768
11	7.9061	222.45	72.09	234.01	525.456	520.425	15.334	14.875	.2088	18.09	6.37	-65.235	.0768
12	8.0025	223.03	71.29	234.45	525.514	520.457	15.334	14.875	.2092	17.96	4.65	-63.284	.0768
13	8.0937	223.15	71.53	23[illegible].35	525.530	520.776	15.333	14.875	.2091	17.73	2.95	-70.282	.0768
14	8.1972	222.63	70.97	23[illegible].03	525.524	520.999	15.333	14.876	.2083	17.61	1.22	-99.019	.0768
15	8.2957	221.19	70.56	232.17	525.595	521.126	15.323	14.876	.2072	17.69	-.49	-134.375	.0768
16	8.3950	219.56	71.47	223.95	525.705	521.380	15.323	14.877	.2051	18.10	-2.15	-286.938	.0768
17	8.4941	215.35	72.17	227.13	525.925	521.646	15.310	14.879	.2025	18.53	-3.73	18366.809	.0768
18	8.6025	212.09	71.57	223.83	525.954	521.800	15.293	14.880	.1993	18.65	-5.25	388.533	.0767
19	8.7034	206.32	70.35	220.07	525.980	521.365	15.237	14.883	.1962	18.81	-6.70	282.710	.0767
20	8.8205	204.38	70.36	215.37	526.011	522.147	15.275	14.885	.1924	19.02	-8.09	380.954	.0767
21	8.9349	199.34	69.36	211.23	526.053	522.354	15.251	14.886	.1882	19.31	-9.36	-1665.883	.0767

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	4.233	-63.351	4.903	.0116	490.8	.4071	456.37	16.750	538.662	1.044	.013	[illegible]	[illegible]
2	-59.425	4.231	-64.130	4.705	.0120	498.4	.4159	466.16	16.816	539.285	1.043	.013	[illegible]	[illegible]
3	-59.867	4.042	-64.370	4.503	.0124	505.9	.4243	475.53	16.882	539.907	1.043	.012	[illegible]	[illegible]
4	-60.260	3.639	-64.562	4.301	.0126	513.3	.4323	484.52	16.949	540.530	1.042	.012	[illegible]	[illegible]
5	-60.607	3.149	-64.709	4.102	.0128	520.6	.4401	493.17	17.016	541.154	1.042	.012	[illegible]	[illegible]
6	-60.920	2.780	-64.830	3.910	.0129	527.8	.4475	501.48	17.084	541.778	1.042	.012	[illegible]	[illegible]
7	-61.215	2.470	-64.942	3.728	.0134	534.8	.4546	509.37	17.151	542.402	1.042	.013	[illegible]	[illegible]
8	-61.503	2.150	-65.063	3.560	.0137	541.9	.4614	517.00	17.218	543.028	1.043	.013	[illegible]	[illegible]
9	-61.790	1.758	-65.202	3.412	.0142	548.8	.4680	524.37	17.286	543.656	1.043	.013	[illegible]	[illegible]
10	-62.084	1.325	-65.371	3.287	.0157	555.7	.4741	531.27	17.351	544.287	1.043	.013	[illegible]	[illegible]
11	-62.389	.834	-65.581	3.192	.0170	562.6	.4802	538.07	17.417	544.925	1.043	.013	[illegible]	[illegible]
12	-62.709	.451	-65.839	3.130	.0150	569.5	.4863	544.92	17.485	545.570	1.044	.013	[illegible]	[illegible]
13	-63.050	.001	-66.151	3.101	.0182	576.4	.4925	551.91	17.557	546.225	1.044	.013	[illegible]	[illegible]
14	-63.416	-.434	-66.520	3.103	.0185	583.3	.4987	558.91	17.630	546.892	1.043	.013	[illegible]	[illegible]
15	-63.811	-1.026	-66.947	3.135	.0224	590.3	.5040	564.85	17.693	547.573	1.043	.013	[illegible]	[illegible]
16	-64.238	-1.508	-67.435	3.196	.0304	597.4	.5081	569.61	17.743	548.274	1.042	.014	[illegible]	[illegible]
17	-64.695	-1.707	-67.982	3.287	.0384	604.7	.5123	574.43	17.795	548.998	1.042	.014	[illegible]	[illegible]
18	-55.172	-1.824	-68.579	3.407	.0421	612.2	.5178	580.69	17.865	549.749	1.041	.014	[illegible]	[illegible]
19	-65.664	-2.001	-69.215	3.551	.0459	619.8	.5234	587.04	17.936	550.529	1.040	.014	[illegible]	[illegible]
20	-66.170	-2.445	-69.557	3.717	.0499	627.6	.5290	593.47	18.011	551.346	1.039	.014	[illegible]	[illegible]
21	-66.694	-3.111	-70.534	3.900	.0544	635.7	.5347	599.96	18.086	552.187	1.038	.014	.7628	.7641

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.042 ISEN. EFF.= .901 POLY. EFF.= .902 DELTA T ON T = .013

STATION 6 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0754	237.79	150.55	281.44	531.263	524.696	15.932	15.253	.2503	32.34	24.47	68.453	.0782
2	7.1703	240.24	148.04	282.13	531.213	524.612	15.924	15.242	.2509	31.64	22.61	124.818	.0782
3	7.2605	242.08	145.83	283.13	531.182	524.536	15.918	15.231	.2518	31.00	20.70	2541.283	.0781
4	7.3500	245.19	143.92	284.33	531.170	524.469	15.914	15.222	.2529	30.41	18.77	-137.574	.0781
5	7.4380	247.74	142.30	285.70	531.177	524.410	15.912	15.213	.2541	29.87	16.83	-69.476	.0781
6	7.5249	250.30	140.96	287.25	531.204	524.363	15.913	15.207	.2555	29.39	14.91	-46.460	.0780
7	7.6109	252.66	140.33	288.89	531.268	524.349	15.915	15.201	.2570	29.01	13.01	-38.914	.0780
8	7.6961	254.94	139.36	290.45	531.344	524.350	15.920	15.198	.2584	28.67	11.15	-34.027	.0780
9	7.7808	256.69	138.81	291.82	531.432	524.372	15.925	15.196	.2596	28.40	9.33	-31.572	.0780
10	7.8652	257.85	138.63	292.85	531.572	524.462	15.930	15.196	.2605	28.30	7.55	-30.623	.0780
11	7.9495	258.56	138.70	293.45	531.705	524.566	15.934	15.198	.2610	28.22	5.82	-30.673	.0779
12	8.0341	258.87	138.40	293.55	531.809	524.665	15.939	15.200	.2610	28.13	4.12	-31.785	.0779
13	8.1192	258.60	137.53	293.07	531.863	524.743	15.940	15.205	.2606	27.99	2.45	-34.136	.0780
14	8.2048	258.09	136.47	291.95	531.900	524.834	15.940	15.210	.2596	27.87	.80	-38.491	.0780
15	8.2917	255.53	137.31	290.09	532.122	525.146	15.937	15.217	.2578	28.25	-.82	-45.730	.0780
16	8.3805	250.99	140.45	287.53	532.576	525.723	15.932	15.225	.2554	29.24	-2.39	-58.029	.0779
17	8.4719	245.48	143.56	284.37	533.038	526.334	15.925	15.235	.2525	30.32	-3.87	-80.456	.0779
18	8.5661	240.79	143.95	280.54	533.238	526.713	15.917	15.245	.2490	30.87	-5.30	-131.282	.0779
19	8.6632	235.47	144.34	276.19	533.442	527.119	15.908	15.257	.2450	31.51	-6.70	-316.516	.0779
20	8.7636	229.43	144.83	271.32	533.665	527.562	15.897	15.270	.2406	32.26	-8.06	26754.991	.0779
21	8.6679	222.63	145.61	266.03	533.924	528.058	15.885	15.283	.2356	33.19	-9.38	1665.883	.0779

BLADE DATA

LOCATION	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	RELATIVE [illegible]	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9625	.9630
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	510.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9599	.9604
3	[illegible]	1.427	[illegible]	[illegible]	[illegible]	515.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.083	.024	.9575	.9580
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4015	[illegible]	17.01[illegible]	541.365	[illegible]	.024	.9555	.9560
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	541.311	[illegible]	.024	.9538	.9543
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.12[illegible]	542.457	[illegible]	.024	.9522	.9527
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.132	543.003	[illegible]	.024	.9495	.9500
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4251	[illegible]	[illegible]	[illegible]	[illegible]	.024	.9470	.9476
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4339	[illegible]	[illegible]	544.100	1.084	.025	.9442	.9448
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4390	[illegible]	[illegible]	544.554	1.084	.025	.9376	.9383
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.343	545.214	1.084	.025	.9312	.9320
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	571.7	[illegible]	[illegible]	[illegible]	545.761	1.084	.025	.9263	.9272
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	577.7	[illegible]	513.0[illegible]	17.514	[illegible]	[illegible]	.025	.9239	.9248
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4592	516.4[illegible]	17.576	[illegible]	1.085	.025	.9214	.9223
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4621	[illegible]	[illegible]	547.545	1.084	.026	.9043	.9054
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	520.37	17.627	548.166	1.084	.027	.8712	.6727
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.634	548.913	1.084	.024	.8387	.8406
18	[illegible]	3.775	[illegible]	[illegible]	.0842	609.5	[illegible]	524.18	17.682	549.486	1.083	.026	.8219	.8239
19	[illegible]	[illegible]	[illegible]	[illegible]	.0917	[illegible]	[illegible]	[illegible]	[illegible]	550.185	1.082	.028	.8045	.8067
20	[illegible]	[illegible]	[illegible]	3.477	.0937	623.5	.4705	533.41	17.775	550.922	1.082	.029	.7859	.7883
21	[illegible]	[illegible]	[illegible]	[illegible]	.1087	631.0	.4734	534.03	[illegible]	551.793	1.081	.029	.7655	.7681

STATION [illegible] INTEGRATED PERFORMANCE PRESSURE RATIO = 1.083 ISEN. EFF.= .[illegible]97 POLY. EFF.= .[illegible]99 DELTA T ON T = .026

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERIDIONAL	VELOCITIES TANGENTIAL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	331.31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.269	.3230	[illegible]	[illegible]	54.510	.0782
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.16	22.57	[illegible]	.0762
3	7.4121	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.237	[illegible]	[illegible]	20.33	-31.762	.0781
4	7.4533	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.228	[illegible]	32.15	15.14	-22.244	.0761
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.222	[illegible]	31.76	15.03	-18.874	.0780
6	[illegible]	311.52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.219	[illegible]	31.43	13.99	-17.048	.0780
7	[illegible]	312.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31.20	12.04	-17.543	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.219	[illegible]	31.01	10.17	-19.264	.0760
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.87	[illegible]	-14.741	.0780
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.227	.3241	30.91	[illegible]	-22.032	.0780
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.233	.3232	[illegible]	[illegible]	-25.512	.0780
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.241	.3219	[illegible]	3.36	-30.648	.0780
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.250	.3203	[illegible]	1.61	-37.790	.0781
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	525.951	[illegible]	15.261	[illegible]	[illegible]	.26	-47.721	.0781
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.274	[illegible]	31.44	[illegible]	-61.567	.0781
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	527.2[illegible]	[illegible]	15.290	[illegible]	[illegible]	-2.72	-82.459	.0760
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	523.217	[illegible]	15.309	[illegible]	34.35	-4.11	-123.175	.0780
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	528.832	[illegible]	15.328	[illegible]	[illegible]	-5.45	[illegible]	.0760
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	529.492	[illegible]	15.320	[illegible]	36.19	-6.77	-375.937	.0780
20	[illegible]	[illegible]	[illegible]	330.01	[illegible]	530.217	[illegible]	[illegible]	.2913	37.33	-8.07	[illegible]	.0780
21	[illegible]	[illegible]	[illegible]	[illegible]	539.804	531.029	15.303	[illegible]	[illegible]	[illegible]	-9.37	***********	.0780

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-46.173	5.746	.0355	516.8	.3874	435.84	16.934	540.825	1.117	.033	.9589	[illegible]
2	-41.129	1.237	-46.638	5.568	.0366	522.1	.3948	444.08	16.973	541.283	1.116	.033	[illegible]	[illegible]
3	-41.793	.757	-47.153	5.390	.0375	527.4	.4014	451.44	17.025	541.749	1.115	.033	.9534	[illegible]
4	-42.436	-.037	-47.648	5.214	.0391	532.6	.4074	458.20	17.072	542.207	1.114	.033	.9511	[illegible]
5	-43.052	-.878	-48.099	5.047	.0385	537.8	.4130	464.51	17.118	542.664	1.114	.033	.9492	[illegible]
6	-43.642	-1.295	-48.535	4.893	.0388	542.9	.4183	470.46	17.166	543.122	1.114	.033	.9473	[illegible]
7	-44.191	-1.209	-48.951	4.759	.0401	548.0	.4230	475.75	17.210	543.582	1.114	.033	.9443	[illegible]
8	-44.718	-.685	-49.361	4.651	.0412	553.1	.4275	480.81	17.256	544.046	1.114	.033	.9414	[illegible]
9	-45.206	-.427	-49.752	4.576	.0426	558.2	.4316	485.54	17.301	544.514	1.114	.033	.9381	[illegible]
10	-45.688	.160	-50.230	4.542	.0470	563.3	.4347	489.12	17.338	544.987	1.114	.034	[illegible]	[illegible]
11	-46.164	.907	-50.721	4.557	.0511	568.4	.4378	492.60	17.375	545.469	1.114	.034	[illegible]	[illegible]
12	-46.648	1.623	-51.269	4.629	.0539	573.6	.4410	496.34	17.418	545.958	1.114	.034	.9175	[illegible]
13	-47.122	2.889	-51.577	4.755	.0546	578.8	.4447	500.60	17.467	546.458	1.114	.034	.9145	[illegible]
14	-47.612	4.070	-52.347	4.935	.0554	584.1	.4483	504.76	17.518	546.968	1.114	.034	.9115	[illegible]
15	-48.116	5.336	-53.281	5.165	.0671	589.5	.4484	505.06	17.534	547.493	1.113	.035	[illegible]	[illegible]
16	-48.643	6.637	-54.092	5.448	.0912	595.1	.4442	500.79	17.508	548.040	1.112	.036	[illegible]	[illegible]
17	-49.197	7.918	-54.987	5.791	.1152	600.8	.4397	496.08	17.480	548.613	1.111	.037	[illegible]	[illegible]
18	-49.761	9.037	-55.350	6.188	.1263	606.3	.4393	495.93	17.499	549.215	1.111	.038	[illegible]	[illegible]
19	-50.316	9.956	-56.350	6.634	.1375	613.1	.4387	495.56	17.518	549.846	1.110	.039	[illegible]	[illegible]
20	-50.846	10.510	-57.370	7.124	.1496	619.6	.4377	494.80	17.535	550.587	1.110	.040	.7621	[illegible]
21	-51.361	10.890	-59.015	7.654	.1631	626.3	.4361	493.40	17.549	551.284	1.110	.041	.7416	.7454

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.113 ISEN. EFF.= .866 POLY. EFF.= .887 DELTA T ON T = .035

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4492	387.05	275.76	475.24	542.923	524.201	17.138	15.156	.4228	35.47	19.79	-2.228	.0778
2	7.5029	381.95	277.04	471.15	543.211	524.810	17.164	15.212	.4189	36.02	17.73	[illegible]	[illegible]
3	7.5572	375.77	278.21	467.55	543.492	525.372	17.183	15.264	.4155	36.52	[illegible]	[illegible]	[illegible]
4	7.6121	371.05	279.04	464.27	543.747	525.881	17.211	15.310	.4124	36.94	[illegible]	[illegible]	[illegible]
5	7.6678	366.30	279.42	461.19	543.965	526.336	17.231	15.352	.4095	37.29	12.29	[illegible]	[illegible]
6	7.7243	363.28	279.46	458.34	544.155	526.742	17.247	15.398	.4068	37.57	10.68	-4.373	[illegible]
7	7.7819	359.86	279.64	455.73	544.368	527.145	17.261	15.423	.4043	37.85	9.15	[illegible]	[illegible]
8	7.8337	356.94	279.71	453.48	544.558	527.513	17.273	15.454	.4022	38.08	7.69	-6.246	[illegible]
9	7.8956	354.28	279.75	451.41	544.756	527.866	17.285	15.482	.4002	38.30	6.29	-7.663	[illegible]
10	7.9585	350.73	280.50	449.10	545.024	528.307	17.296	15.508	.3980	38.65	4.93	-9.689	[illegible]
11	8.0194	347.26	281.03	446.73	545.276	528.735	17.303	15.533	.3957	38.98	3.61	[illegible]	[illegible]
12	8.0814	344.13	280.98	444.27	545.477	529.118	17.309	15.558	.3934	39.23	2.30	[illegible]	[illegible]
13	8.1444	341.52	280.14	441.72	545.605	529.433	17.314	15.582	.3910	39.36	1.00	[illegible]	[illegible]
14	8.2085	338.72	279.17	438.94	545.723	529.754	17.319	15.608	.3885	39.50	-.30	[illegible]	[illegible]
15	8.2741	331.52	282.80	435.24	546.215	530.514	17.315	15.635	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	8.3424	319.00	289.64	431.01	547.213	531.817	17.311	15.664	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	8.4144	305.63	298.74	427.39	548.343	533.205	17.314	15.697	.3778	44.35	-4.21	[illegible]	[illegible]
18	8.4895	297.88	303.27	424.94	549.061	534.125	17.323	15.733	.3742	[illegible]	[illegible]	[illegible]	[illegible]
19	8.5683	288.21	308.68	422.31	549.888	535.108	17.351	15.772	.3719	[illegible]	[illegible]	[illegible]	[illegible]
20	8.6502	278.07	315.30	420.93	550.861	536.179	17.383	15.813	.3703	[illegible]	[illegible]	[illegible]	[illegible]
21	8.7359	268.66	323.34	420.39	552.009	537.364	17.423	15.856	.3694	50.26	-9.37	[illegible]	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF.	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.559	-33.317	9.164	.0474	530.1	.4120	463.13	17.035	541.981	1.166	.047	.9604	.9613
2	-24.486	2.318	-33.430	8.974	.0453	533.9	.4086	453.57	17.055	542.310	1.168	.047	.9584	.9593
3	-25.109	2.500	-34.233	8.864	.0497	537.8	.4058	455.64	17.097	542.561	1.170	.048	.9566	.9575
4	[illegible]	2.113	-34.741	[illegible]	.0501	541.7	.4038	454.54	17.130	543.011	1.171	.048	.9550	.9560
5	-27.492	1.471	[illegible]	9.601	.0510	545.5	.4025	453.30	17.154	543.366	1.172	.049	.9536	.9547
6	-28.379	1.109	-35.943	9.351	.0516	549.7	.4018	452.75	17.200	543.733	1.174	.049	.9523	.9534
7	-29.350	1.132	[illegible]	[illegible]	.0534	553.7	.4013	452.35	17.233	544.105	1.175	.049	.9496	.9508
8	-30.763	1.514	-37.325	9.160	.0549	557.3	.4013	452.52	17.257	544.466	1.175	.050	.9472	.9484
9	-31.434	[illegible]	[illegible]	9.115	.0567	562.1	.4016	453.00	17.301	544.875	1.176	.050	.9444	.9456
10	-31.997	2.727	-39.177	9.123	.0525	566.3	.4009	452.44	17.324	545.274	1.177	.051	.9376	.9391
11	[illegible]	3.543	[illegible]	[illegible]	.0631	570.5	.4006	452.18	17.348	545.662	1.177	.051	.9311	.9327
12	-32.202	4.757	[illegible]	5.319	.0718	575.1	.4008	452.67	17.373	546.101	1.174	.052	.9261	.9277
13	-32.729	5.059	-41.240	9.511	.0725	579.5	.4021	454.16	17.419	546.530	1.178	.052	.9235	.9253
14	-33.224	7.450	-41.947	9.271	.0735	584.1	.4033	455.76	17.459	546.963	1.175	.052	.9218	.9225
15	-33.555	8.349	-42.774	9.091	.0834	588.0	.3394	451.66	17.451	547.423	1.178	.053	.9037	.9059
16	-34.123	10.334	-43.531	9.478	.1216	593.6	.3891	440.51	17.387	547.900	1.178	.055	.8703	.8733
17	-34.333	11.712	-44.439	9.335	.1537	598.8	.3778	429.27	17.321	548.406	1.178	.057	.8381	.8419
18	-34.800	12.702	-45.301	[illegible]	.1684	604.1	.3727	422.81	17.315	548.940	1.179	.059	.8226	.8267
19	-35.281	13.220	-46.247	11.045	.1934	609.7	.3670	416.76	17.309	549.502	1.181	.060	.8073	.8118
20	-35.423	13.327	-47.113	11.555	.1935	615.5	.3605	409.77	17.238	550.093	1.183	.062	.7916	.7965
21	-35.517	13.734	-47.332	12.375	.2174	621.6	.3528	401.44	17.281	550.719	1.166	.064	.7751	.7804

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.177 ISEN. EFF.= .897 POLY. EFF.= .899 DELTA T ON T = .053

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG'L	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5499	338.98	393.86	550.74	553.410	528.274	18.301	15.350	.4831	45.07	10.63	-2.464	.0792
2	7.5935	381.99	393.74	545.33	553.518	528.595	18.304	15.507	.4829	45.51	9.69	-3.158	.0794
3	7.6355	375.45	387.07	540.37	553.619	529.419	18.307	15.654	.4794	45.84	9.13	-4.051	.0796
4	7.6847	372.98	385.34	536.39	553.709	529.866	18.310	15.593	.4745	46.08	8.36	-5.199	.0797
5	7.7320	363.54	384.33	532.24	553.791	530.253	18.313	15.728	.4714	46.23	7.57	-6.693	.0798
6	7.7815	365.92	383.35	529.35	553.871	530.596	18.315	15.758	.4680	46.33	6.77	-8.693	.0799
7	7.8333	363.40	382.20	527.50	554.017	530.943	18.321	15.804	.4664	46.47	5.95	-11.511	.0800
8	7.8905	361.39	381.55	525.53	554.156	531.268	18.326	15.808	.4644	46.55	5.13	-15.779	.0801
9	7.9371	359.75	380.91	523.95	554.328	531.579	18.331	15.830	.4623	46.64	4.29	-23.101	.0801
10	7.9845	357.39	383.47	524.53	554.505	532.005	18.351	15.850	.4632	46.98	3.45	-39.509	.0802
11	8.0331	356.37	385.93	525.29	555.230	532.415	18.397	15.868	.4637	47.28	2.58	-119.265	.0802
12	8.0925	355.20	385.84	525.13	555.514	532.759	18.404	15.885	.4635	47.44	1.70	123.354	.0802
13	8.1479	354.47	385.15	523.45	555.705	533.001	18.403	15.900	.4614	47.38	.79	40.735	.0803
14	8.2042	354.35	383.43	521.94	555.900	533.226	18.402	15.914	.4604	47.29	-.14	24.041	.0803
15	8.2615	348.33	387.52	520.95	556.465	533.976	18.413	15.926	.4592	48.08	-1.11	15.829	.0802
16	8.3215	334.33	399.77	520.51	557.829	535.390	18.405	15.938	.4582	50.01	-2.13	13.086	.0801
17	8.3547	319.43	410.30	519.48	559.266	536.864	18.407	15.951	.4571	52.10	-3.24	11.146	.0799
18	8.4517	311.77	414.73	518.33	560.036	537.727	18.409	15.965	.4558	53.07	-4.44	10.142	.0799
19	8.5205	303.27	419.55	517.65	560.853	538.649	18.410	15.980	.4544	54.14	-5.74	9.732	.0798
20	8.5333	293.07	424.94	516.21	561.756	539.581	18.412	15.998	.4526	55.41	-7.20	10.555	.0798
21	8.6049	273.57	431.33	514.07	562.794	540.901	18.414	16.023	.4503	57.04	-8.95	20.749	.0797

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.931	-20.749	8.101	.0587	537.2	.3686	415.95	17.080	542.615	1.245	.067	[illegible]	.9664
2	-13.533	10.[illegible]	-21.633	8.101	.0605	540.3	.3640	410.94	17.102	542.892	1.246	.067	[illegible]	[illegible]
3	-14.418	10.115	-22.493	8.074	.0620	543.5	.3607	407.44	17.126	543.179	1.246	.067	[illegible]	[illegible]
4	-15.291	9.364	-23.332	8.042	.0630	546.8	.3586	405.21	17.151	543.476	1.246	.068	[illegible]	[illegible]
5	-16.191	8.433	-24.155	7.974	.0637	550.2	.3574	404.01	17.179	543.783	1.246	.068	[illegible]	[illegible]
6	-17.063	7.640	-24.956	7.893	.0642	553.6	.3569	403.61	17.208	544.098	1.246	.068	[illegible]	[illegible]
7	-17.895	7.034	-25.571	7.775	.0665	557.2	.3564	403.20	17.233	544.422	1.247	.068	[illegible]	[illegible]
8	-18.640	6.712	-26.377	7.729	.0684	560.8	.3565	403.39	17.259	544.756	1.247	.068	.9512	[illegible]
9	-19.323	6.668	-27.025	7.705	.0708	564.4	.3568	403.86	17.286	545.098	1.248	.069	[illegible]	[illegible]
10	-19.928	6.945	-27.298	7.370	.0781	568.2	.3557	402.74	17.298	545.448	1.249	.070	[illegible]	[illegible]
11	-20.473	7.521	-27.559	7.097	.0850	572.0	.3549	402.00	17.311	545.808	1.251	.071	[illegible]	[illegible]
12	-20.960	8.351	-28.020	7.060	.0897	575.9	.3551	402.36	17.331	546.177	1.252	.071	[illegible]	[illegible]
13	-21.395	9.443	-28.768	7.374	.0910	579.8	.3568	404.38	17.362	546.554	1.252	.071	[illegible]	[illegible]
14	-21.772	10.531	-29.499	7.727	.0923	583.8	.3586	406.79	17.394	546.939	1.252	.072	[illegible]	[illegible]
15	-22.076	11.719	-29.313	7.936	.1113	587.9	.3539	401.52	17.366	547.337	1.252	.073	[illegible]	[illegible]
16	-22.295	12.749	-30.031	7.735	.1520	592.1	.3402	386.40	17.266	547.753	1.252	.075	[illegible]	[illegible]
17	-22.407	13.545	-30.260	7.853	.1921	596.7	.3251	369.82	17.162	548.197	1.253	.078	[illegible]	[illegible]
18	-22.378	13.934	-30.903	8.525	.2105	601.4	.3192	363.35	17.132	548.568	1.253	.080	[illegible]	[illegible]
19	-22.181	13.832	-31.529	9.448	.2293	606.3	.3126	356.17	17.100	549.162	1.253	.081	[illegible]	[illegible]
20	-21.839	13.580	-32.477	10.639	.2493	611.5	.3046	347.41	17.061	549.582	1.253	.083	[illegible]	[illegible]
21	-21.371	13.159	-33.370	12.199	.2718	616.9	.2940	335.66	17.013	550.237	1.253	.085	.7818	[illegible]

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.250 ISEN. EFF.= .904 POLY. EFF.= .907 DELTA T ON T = .073

STATION 10 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5746	368.55	389.61	535.58	553.410	529.639	18.301	15.691	.4740	46.52	7.82	9.349	.0797
2	7.6218	369.19	387.40	535.15	553.518	529.785	18.304	15.699	.4736	46.38	7.80	10.177	.0797
3	7.6695	370.99	385.10	535.45	553.618	529.858	18.307	15.699	.4738	46.14	7.55	12.102	.0797
4	7.7175	373.41	384.70	536.12	553.709	529.869	18.310	15.696	.4744	45.85	7.17	14.431	.0797
5	7.7656	376.07	383.22	536.92	553.791	529.901	18.313	15.691	.4751	45.54	6.70	16.754	.0797
6	7.8135	378.65	381.74	537.59	553.871	529.913	18.315	15.687	.4758	45.23	6.18	18.883	.0796
7	7.8613	380.67	380.98	538.57	554.017	529.980	18.321	15.684	.4765	45.02	5.62	20.349	.0796
8	7.9095	382.48	380.15	539.26	554.156	530.056	18.325	15.682	.4771	44.83	5.04	21.068	.0796
9	7.9578	384.03	379.69	540.04	554.328	530.160	18.333	15.682	.4777	44.67	4.44	20.889	.0796
10	8.0065	384.91	382.42	542.53	554.805	530.407	18.360	15.684	.4799	44.81	3.83	19.978	.0796
11	8.0556	385.66	385.03	545.00	555.280	530.665	18.387	15.686	.4819	44.96	3.22	18.688	.0795
12	8.1054	386.30	386.23	546.25	555.614	530.886	18.404	15.690	.4829	44.99	2.59	17.109	.0795
13	8.1556	386.80	384.61	545.62	555.708	531.038	18.403	15.696	.4823	44.85	1.94	15.649	.0795
14	8.2066	386.98	383.38	544.73	555.800	531.210	18.402	15.704	.4814	44.73	1.27	14.338	.0795
15	8.2587	381.40	387.73	543.92	556.465	531.949	18.403	15.715	.4804	45.48	.56	13.152	.0795
16	8.3130	368.30	393.16	543.13	557.629	533.386	18.405	15.731	.4790	47.30	-.22	11.988	.0793
17	8.3706	352.99	411.00	541.77	559.266	534.946	18.407	15.752	.4771	49.34	-1.14	10.788	.0793
18	8.4317	343.70	415.70	539.43	560.036	535.925	18.403	15.778	.4746	50.42	-2.18	9.253	.0792
19	8.4964	333.27	420.76	536.73	560.853	536.983	18.410	15.808	.4715	51.62	-3.36	7.536	.0792
20	8.5655	321.75	426.32	534.11	561.758	538.123	18.412	15.837	.4690	52.96	-4.67	5.488	.0792
21	8.6399	310.13	432.53	532.47	562.794	539.305	18.414	15.858	.4671	54.38	-6.18	3.053	.0791

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	---VELOCITY--- MERID	TANG	TOTAL	--TEMP-- TOTAL	STATIC	--PRESSURE-- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	343.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.511	[illegible]	[illegible]	3.06	26.307	.0794
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.516	[illegible]	43.9[illegible]	3.56	-150.305	.0791
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.431	[illegible]	[illegible]	7.91	-27.556	.0767
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.365	[illegible]	41.9	7.2[illegible]	-1[illegible].615	.0785
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.314	.5117	41.26	6.52	-12.354	.0763
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.245	[illegible]	40.[illegible]	5.87	-14.214	.0782
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.27	-14.221	.0761
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.73	-15.037	.0760
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.253	[illegible]	[illegible]	[illegible]	-15.541	.0769
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.257	.5212	40.39	3.79	-19.704	.0780
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.257	[illegible]	40.64	3.37	-24.350	.0760
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.283	[illegible]	40.52	2.95	-33.342	.0760
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.304	[illegible]	[illegible]	[illegible]	-55.570	.0761
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.330	[illegible]	[illegible]	2.14	-245.399	.0762
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.360	.5145	[illegible]	1.70	95.547	.0762
16	[illegible]	[illegible]	[illegible]	[illegible]	377.62[illegible]	[illegible]	[illegible]	15.399	.5113	43.[illegible]	1.14	43.152	.0781
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.491	[illegible]	[illegible]	.41	31.596	.0781
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	533.611	[illegible]	15.520	[illegible]	47.[illegible]	-.59	23.570	.0783
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.511	[illegible]	[illegible]	-1.60	32.651	.0785
20	[illegible]	[illegible]	[illegible]	[illegible]	531.758	537.354	[illegible]	15.728	[illegible]	51.[illegible]	-2.89	93.519	.0768
21	[illegible]	[illegible]	[illegible]	531.77	[illegible]	539.[illegible]	[illegible]	15.594	[illegible]	54.67	-4.[illegible]7	-27.451	.0791

BLADE DATA

LOCATION	BLADE-ANGLE [illegible]	[illegible]	RELATIVE [illegible]	DEVIATION [illegible]	LOSS COEFF	BLADE [illegible]	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible].317	[illegible]	[illegible].13	[illegible]	[illegible]	0.0	[illegible]	544.29	18.301	553.410	1.245	.057	.9653	.9664
2	-7.335	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	18.31[illegible]	553.518	1.245	.057	.9632	.9643
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	563.95	18.3[illegible]7	553.615	1.246	.057	.9612	.9624
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	521.12	18.31[illegible]	553.709	1.246	.058	.9594	.9607
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.31[illegible]	[illegible].751	1.246	.063	.9578	.9591
6	[illegible].355	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	574.62	18.31[illegible]	553.871	1.24[illegible]	.058	.9563	.9577
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible].173	[illegible]	18.321	554.017	1.247	.065	.9537	.9551
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible].167	[illegible]	18.3[illegible]	554.155	1.247	.063	.9512	.9527
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	554.325	1.248	.069	.9464	.9500
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	527.[illegible]	18.33[illegible]	[illegible]	1.249	.070	.9422	.9440
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.337	555.280	1.251	.071	.9363	.9383
12	[illegible].521	-1.[illegible]	[illegible]	[illegible]	0.0[illegible]	[illegible]	[illegible]	595.4	18.43[illegible]	555.514	1.252	.071	.9317	.9338
13	[illegible].353	1.[illegible]	[illegible]	[illegible]	0.0[illegible]	[illegible]	.5261	[illegible]	18.403	555.709	1.252	.071	.9292	.9314
14	[illegible]	[illegible]	[illegible]	[illegible]	0.00[illegible]	[illegible]	.5177	553.73	18.432	[illegible]	1.252	.072	.9267	.9290
15	[illegible].345	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	581.9[illegible]	18.433	[illegible]	1.252	.073	.9105	.9133
16	[illegible].113		[illegible]	[illegible]	[illegible]	[illegible]	.5113	577.02	18.43[illegible]	557.323	1.252	.075	.8792	.8830
17	[illegible]		[illegible]	[illegible]	[illegible]	0.0	[illegible]	573.53	18.40[illegible]	[illegible].265	1.253	.078	.8486	.8533
18	[illegible].151		[illegible]	1.0[illegible]1	[illegible]	[illegible]	[illegible]	565.8[illegible]	18.409	550.036	1.253	.080	.8331	.8383
19	[illegible]	[illegible]	[illegible]	1.[illegible]	0.000[illegible]	0.0	[illegible]	557.84	18.419	550.553	1.253	.081	.8172	.8229
20	[illegible]	[illegible]	[illegible]	[illegible]	0.000[illegible]	0.0	.4739	545.00	18.412	551.7[illegible]8	1.253	.083	.8003	.8066
21	[illegible]	[illegible]	[illegible].571	[illegible]	0.000[illegible]	0.0	.4654	531.77	18.414	552.794	1.253	.085	.7818	.7887

STATION 11 [illegible] PERFORMANCE PRESSURE RATIO = 1.253 ISEN. EFF.= .904 POLY. EFF.= .907 DELTA T ON T = .073

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	539.64	347.55	642.05	553.410	519.243	18.260	14.607	.5739	32.81	5.21	-3.688	.0757
2	7.7543	535.41	342.30	635.43	553.518	520.047	18.265	14.680	.5676	32.59	4.44	-3.711	.0759
3	7.7935	531.29	335.10	629.09	553.618	520.860	18.269	14.754	.5611	32.32	3.71	-3.805	.0762
4	7.8328	527.31	329.71	621.91	553.709	521.653	18.271	14.826	.5546	32.02	3.06	-3.980	.0765
5	7.8721	523.35	323.80	615.42	553.791	522.401	18.273	14.895	.5484	31.75	2.50	-4.237	.0767
6	7.9115	519.34	318.84	609.40	553.871	523.092	18.274	14.957	.5427	31.55	2.05	-4.568	.0769
7	7.9513	515.53	314.92	604.14	554.017	523.767	18.276	15.014	.5377	31.41	1.71	-4.969	.0771
8	7.9914	512.31	311.20	599.42	554.156	524.377	18.281	15.065	.5332	31.28	1.46	-5.443	.0773
9	8.0320	509.57	307.31	595.37	554.328	524.951	18.286	15.110	.5293	31.14	1.29	-6.008	.0774
10	8.0731	508.33	305.09	593.16	554.805	525.646	18.306	15.151	.5270	31.02	1.19	-6.715	.0775
11	8.1147	507.25	304.00	591.39	555.280	526.295	18.325	15.187	.5251	30.93	1.13	-7.647	.0776
12	8.1553	505.05	302.63	589.28	555.614	526.837	18.337	15.220	.5229	30.90	1.10	-8.905	.0777
13	8.1997	502.30	301.17	586.18	555.708	527.231	18.334	15.248	.5200	30.92	1.10	-10.647	.0778
14	8.2431	500.25	300.24	583.46	555.900	527.588	18.332	15.274	.5174	30.98	1.11	-13.198	.0779
15	8.2871	499.14	300.13	581.57	556.465	528.436	18.331	15.295	.5153	31.07	1.11	-17.760	.0779
16	8.3315	498.29	301.05	580.47	557.829	529.908	18.329	15.311	.5135	31.24	1.03	-31.046	.0777
17	8.3773	494.31	303.75	580.13	559.256	531.374	18.325	15.319	.5127	31.57	.83	-1067.721	.0776
18	8.4239	491.33	309.56	580.74	560.036	532.090	18.323	15.314	.5128	32.11	.47	27.524	.0774
19	8.4715	490.41	315.03	583.45	560.553	532.646	18.322	15.291	.5150	32.80	-.09	12.891	.0772
20	8.5211	490.38	325.80	588.49	561.756	533.062	18.319	15.244	.5192	33.62	-.91	8.180	.0769
21	8.5730	490.52	337.90	595.61	562.794	533.401	18.315	15.177	.5253	34.56	-2.03	5.947	.0766

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.547	32.809	.849	.0149	0.0	.5739	642.05	18.260	553.410	1.243	.067	.9554	.9567
2	31.736	-23.339	32.592	.855	.0141	0.0	.5676	635.46	18.265	553.518	1.243	.067	.9534	.9549
3	31.450	-21.342	32.315	.859	.0135	0.0	.5611	629.68	18.269	553.618	1.243	.067	.9516	.9531
4	31.133	-19.037	32.017	.884	.0133	0.0	.5546	621.91	18.271	553.709	1.243	.068	.9498	.9513
5	30.841	-16.632	31.745	.904	.0133	0.0	.5484	615.42	18.273	553.791	1.243	.068	.9481	.9496
6	30.621	-14.336	31.547	.926	.0136	0.0	.5427	609.40	18.274	553.871	1.243	.068	.9463	.9479
7	30.455	-12.243	31.407	.949	.0141	0.0	.5377	604.14	18.276	554.017	1.244	.068	.9432	.9449
8	30.306	-10.136	31.276	.970	.0146	0.0	.5332	599.42	18.281	554.156	1.244	.068	.9403	.9421
9	30.153	-7.990	31.143	.990	.0154	0.0	.5293	595.37	18.286	554.328	1.244	.069	.9369	.9389
10	30.012	-5.809	31.070	1.009	.0176	0.0	.5270	593.16	18.306	554.805	1.246	.070	.9292	.9314
11	29.909	-3.654	30.934	1.024	.0193	0.0	.5251	591.39	18.325	555.280	1.247	.071	.9218	.9242
12	29.861	-1.576	30.893	1.038	.0214	0.0	.5229	589.28	18.337	555.514	1.248	.071	.9161	.9187
13	29.865	.513	30.916	1.047	.0221	0.0	.5200	586.18	18.334	555.708	1.248	.071	.9132	.9159
14	29.922	2.732	30.975	1.053	.0228	0.0	.5174	583.46	18.332	555.880	1.247	.072	.9104	.9132
15	30.015	5.442	31.069	1.054	.0236	0.0	.5153	581.57	18.331	556.465	1.247	.073	.8942	.8975
16	30.191	8.535	31.242	1.051	.0254	0.0	.5136	580.47	18.329	557.829	1.247	.075	.8625	.8667
17	30.521	12.038	31.570	1.049	.0275	0.0	.5127	580.18	18.326	559.266	1.247	.078	.8314	.8366
18	31.056	16.077	32.105	1.050	.0297	0.0	.5128	580.74	18.323	560.036	1.247	.080	.8152	.8201
19	31.749	20.281	32.804	1.055	.0317	0.0	.5150	583.45	18.322	560.853	1.247	.081	.7991	.8053
20	32.552	24.335	33.615	1.064	.0345	0.0	.5192	588.49	18.319	561.758	1.247	.083	.7810	.7885
21	33.479	28.225	34.557	1.079	.0356	0.0	.5253	595.61	18.315	562.794	1.246	.085	.7627	.7699

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.246 ISEN. EFF.= .890 POLY. EFF.= .893 DELTA T ON T = .073

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	528.96	167.64	554.39	553.410	527.893	18.222	15.444	.4919	17.58	-2.23	-5.196	.0787
2	7.7576	522.04	164.35	547.45	553.518	528.678	18.225	15.517	.4850	17.53	-2.29	-5.836	.0790
3	7.7930	515.40	162.64	540.45	553.618	529.412	18.227	15.585	.4784	17.51	-2.32	-6.618	.0792
4	7.8234	509.03	160.54	533.33	553.709	530.092	18.229	15.648	.4723	17.51	-2.31	-7.567	.0794
5	7.8657	503.25	158.77	527.70	553.791	530.715	18.231	15.705	.4666	17.51	-2.27	-8.704	.0796
6	7.9049	498.04	156.90	522.14	553.871	531.278	18.231	15.756	.4614	17.48	-2.18	-10.039	.0798
7	7.9441	493.74	154.99	517.46	554.017	531.827	18.233	15.800	.4571	17.42	-2.05	-11.564	.0799
8	7.9844	490.17	153.24	513.56	554.156	532.300	18.235	15.837	.4534	17.36	-1.88	-13.254	.0800
9	8.0255	487.32	152.25	510.55	554.328	532.728	18.233	15.867	.4506	17.35	-1.66	-15.056	.0801
10	8.0677	486.33	152.15	509.29	554.805	533.311	18.251	15.891	.4492	17.38	-1.45	-15.902	.0802
11	8.1106	485.24	152.36	508.60	555.280	533.845	18.263	15.910	.4484	17.43	-1.21	-18.722	.0802
12	8.1543	484.35	152.40	507.76	555.614	534.250	18.270	15.925	.4475	17.47	-.95	-20.463	.0802
13	8.1988	482.76	152.10	506.15	555.708	534.479	18.266	15.936	.4460	17.49	-.68	-22.120	.0802
14	8.2441	481.55	151.99	504.95	555.800	534.671	18.262	15.943	.4448	17.51	-.41	-23.736	.0802
15	8.2900	481.00	152.27	504.50	556.465	535.375	18.259	15.947	.4441	17.56	-.14	-25.472	.0801
16	8.3367	480.61	152.99	504.34	557.829	536.753	18.251	15.947	.4434	17.65	.13	-27.738	.0799
17	8.3841	480.55	154.32	504.72	559.265	538.160	18.243	15.942	.4432	17.80	.39	-31.454	.0797
18	8.4321	480.56	155.63	505.38	560.035	538.874	18.235	15.932	.4435	18.05	.62	-39.247	.0795
19	8.4806	481.42	163.07	507.34	560.853	539.528	18.230	15.915	.4449	18.39	.79	-62.062	.0794
20	8.5297	483.12	164.38	510.32	561.758	540.182	18.226	15.888	.4473	18.79	.89	-305.551	.0791
21	8.5795	483.63	169.39	514.33	562.794	540.379	18.220	15.852	.4505	19.23	.88	76.314	.0789

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.414	17.585	1.351	.0293	0.0	.4919	554.89	18.222	553.410	1.240	.067	.9457	.9474
2	16.179	-8.912	17.535	1.356	.0284	0.0	.4850	547.46	18.225	553.518	1.240	.067	.9436	.9452
3	16.147	-8.339	17.514	1.367	.0277	0.0	.4784	540.45	18.227	553.618	1.240	.067	.9415	.9432
4	16.125	-7.687	17.513	1.384	.0274	0.0	.4723	533.83	18.229	553.709	1.240	.068	.9395	.9414
5	16.092	-6.940	17.510	1.419	.0274	0.0	.4666	527.70	18.231	553.791	1.241	.068	.9377	.9395
6	16.022	-6.085	17.475	1.453	.0278	0.0	.4614	522.14	18.231	553.871	1.241	.068	.9357	.9377
7	15.924	-5.142	17.416	1.492	.0285	0.0	.4571	517.46	18.233	554.017	1.241	.068	.9323	.9344
8	15.831	-4.154	17.361	1.530	.0296	0.0	.4534	513.56	18.235	554.156	1.241	.068	.9291	.9312
9	15.785	-3.171	17.351	1.565	.0310	0.0	.4506	510.55	18.233	554.328	1.241	.069	.9253	.9276
10	15.786	-2.244	17.384	1.598	.0353	0.0	.4492	509.29	18.251	554.805	1.242	.070	.9161	.9187
11	15.805	-1.420	17.432	1.627	.0397	0.0	.4484	508.60	18.263	555.280	1.243	.071	.9072	.9100
12	15.815	-.741	17.467	1.652	.0428	0.0	.4475	507.76	18.270	555.614	1.243	.071	.9006	.9036
13	15.817	-.135	17.495	1.671	.0442	0.0	.4460	506.15	18.266	555.708	1.243	.071	.8973	.9004
14	15.831	.459	17.513	1.662	.0456	0.0	.4448	504.95	18.262	555.800	1.243	.072	.8942	.8974
15	15.874	1.217	17.559	1.634	.0473	0.0	.4441	504.50	18.259	556.465	1.242	.073	.8777	.8814
16	15.965	2.129	17.646	1.680	.0512	0.0	.4434	504.34	18.251	557.829	1.242	.075	.8454	.8501
17	16.127	3.136	17.803	1.676	.0556	0.0	.4432	504.72	18.243	559.266	1.241	.078	.8138	.8194
18	16.379	4.231	18.055	1.676	.0602	0.0	.4435	505.38	18.235	560.035	1.241	.080	.7969	.8030
19	16.711	5.536	18.392	1.581	.0642	0.0	.4449	507.34	18.230	560.853	1.241	.081	.7805	.7871
20	17.096	6.861	18.790	1.694	.0693	0.0	.4473	510.32	18.226	561.758	1.240	.083	.7631	.7703
21	17.510	8.542	19.229	1.713	.0760	0.0	.4505	514.33	18.220	562.794	1.240	.085	.7448	.7517

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.241 ISEN. EFF.= .875 POLY. EFF.= .879 DELTA T ON T = .073

STATION 14 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	442.34	47.92	444.92	553.410	537.007	18.193	16.363	.3911	6.18	-4.29	16.241	.0820
2	7.7112	442.41	46.93	444.89	553.518	537.117	18.184	16.365	.3910	6.06	-4.03	17.442	.0820
3	7.7511	442.43	46.34	444.82	553.618	537.223	18.185	16.367	.3909	5.94	-3.76	18.817	.0820
4	7.7915	442.39	45.23	444.71	553.709	537.321	18.186	16.369	.3908	5.85	-3.50	20.415	.0820
5	7.8329	442.33	44.68	444.58	553.791	537.413	18.187	16.371	.3906	5.77	-3.23	22.306	.0820
6	7.8750	442.24	[illegible]	444.44	553.871	537.504	18.187	16.372	.3905	5.70	-2.97	24.624	.0820
7	7.9177	442.27	43.70	444.42	554.017	537.651	18.188	16.373	.3904	5.64	-2.71	27.601	.0819
8	7.9612	442.32	43.31	444.44	554.156	537.788	18.188	16.374	.3904	5.59	-2.45	31.603	.0819
9	8.0054	442.50	43.02	444.58	554.328	537.951	18.189	16.375	.3905	5.55	-2.19	37.129	.0819
10	8.0533	443.40	42.37	445.46	554.805	538.362	18.195	16.374	.3911	5.52	-1.92	44.789	.0818
11	8.0959	444.37	42.82	446.43	555.280	538.766	18.201	16.374	.3918	5.50	-1.66	55.441	.0818
12	8.1421	445.00	42.80	447.05	555.614	539.055	18.203	16.372	.3922	5.49	-1.39	70.951	.0817
13	8.1890	444.76	42.75	446.81	555.708	539.166	18.198	16.369	.3920	5.49	-1.13	95.916	.0817
14	8.2367	444.67	42.73	446.73	555.800	539.264	18.193	16.365	.3919	5.49	-.86	141.439	.0817
15	8.2850	444.98	42.91	447.05	556.465	539.906	18.188	16.361	.3919	5.51	-.60	242.416	.0815
16	8.3340	444.76	43.11	446.84	557.829	541.286	18.175	16.355	.3912	5.54	-.32	593.866	.0813
17	8.3837	444.55	43.52	446.68	559.266	542.736	18.162	16.350	.3906	5.59	-.04	-6308.169	.0810
18	8.4342	444.00	44.13	446.19	560.036	543.542	18.149	16.344	.3899	5.68	.24	-702.182	.0809
19	8.4855	444.12	45.34	446.42	560.853	544.343	18.141	16.337	.3898	5.83	.53	-471.938	.0807
20	8.5374	444.20	47.03	446.68	561.758	545.229	18.133	16.331	.3897	6.05	.80	-461.377	.0806
21	8.5900	444.19	49.25	446.91	562.794	546.249	18.124	16.324	.3895	6.33	1.06	-610.607	.0804

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	6.193	2.218	.0438	0.0	.3911	444.92	18.193	553.410	1.237	.067	.9360	.9379
2	3.829	-.933	6.055	2.227	.0430	0.0	.3910	444.89	18.184	553.518	1.237	.067	.9335	.9355
3	3.693	-.917	5.941	2.248	.0423	0.0	.3909	444.82	18.185	553.618	1.237	.067	.9311	.9331
4	3.563	-.830	5.846	2.283	.0421	0.0	.3908	444.71	18.186	553.709	1.237	.068	.9289	.9310
5	3.438	-.740	5.758	2.330	.0421	0.0	.3906	444.58	18.187	553.791	1.238	.068	.9268	.9290
6	3.317	-.653	5.731	2.384	.0425	0.0	.3905	444.44	18.187	553.871	1.238	.068	.9248	.9270
7	3.199	-.576	5.643	2.444	.0436	0.0	.3904	444.42	18.188	554.017	1.238	.068	.9211	.9235
8	3.087	-.509	5.593	2.505	.0449	0.0	.3904	444.44	18.188	554.156	1.238	.068	.9176	.9201
9	2.986	-.452	5.553	2.567	.0469	0.0	.3905	444.58	18.189	554.328	1.238	.069	.9134	.9160
10	2.899	-.402	5.523	2.624	.0533	0.0	.3911	445.46	18.195	554.805	1.238	.070	.9028	.9057
11	2.829	-.347	5.504	2.675	.0597	0.0	.3918	446.43	18.201	555.280	1.238	.071	.8924	.8956
12	2.779	-.274	5.494	2.715	.0643	0.0	.3922	447.05	18.203	555.614	1.239	.071	.8849	.8883
13	2.750	-.191	5.491	2.741	.0662	0.0	.3920	446.81	18.198	555.708	1.238	.071	.8814	.8850
14	2.745	-.140	5.495	2.749	.0682	0.0	.3919	446.73	18.193	555.800	1.238	.072	.8780	.8816
15	2.768	-.161	5.539	2.740	.0707	0.0	.3919	447.05	18.188	556.465	1.238	.073	.8615	.8656
16	2.817	-.203	5.537	2.720	.0764	0.0	.3912	446.84	18.175	557.829	1.237	.075	.8287	.8337
17	2.889	-.431	5.591	2.702	.0829	0.0	.3906	446.68	18.162	559.266	1.236	.078	.7965	.8026
18	2.983	-.639	5.683	2.700	.0900	0.0	.3899	446.19	18.149	560.036	1.235	.080	.7789	.7854
19	3.113	-.838	5.830	2.717	.0962	0.0	.3898	446.42	18.141	560.853	1.234	.081	.7622	.7691
20	3.291	-.976	6.045	2.756	.1038	0.0	.3897	446.68	18.133	561.758	1.234	.083	.7445	.7520
21	3.508	-1.055	6.326	2.818	.1135	0.0	.3895	446.91	18.124	562.794	1.233	.085	.7253	.7333

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.237 ISEN. EFF.= .860 POLY. EFF.= .864 DELTA T ON T = .073

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	397.39	0.00	397.39	553.410	540.286	18.144	16.550	.3489	0.00	-1.66	10.624	.0831
2	[illegible]	399.54	0.00	399.54	553.518	540.291	18.144	16.559	.3501	0.00	-1.61	11.354	.0830
3	7.7234	401.02	0.00	401.02	553.615	540.233	18.143	16.553	.3514	0.00	-1.55	12.180	.0830
4	7.7655	402.41	0.00	402.41	553.709	540.231	18.143	16.549	.3527	0.00	-1.48	13.123	.0829
5	7.9133	403.72	0.00	403.72	553.791	540.286	18.143	16.539	.3539	0.00	-1.41	14.210	.0829
6	7.8347	404.91	0.00	404.91	553.871	540.257	18.142	16.530	.3549	0.00	-1.33	15.476	.0826
7	7.9933	406.04	0.00	406.04	554.017	540.356	18.141	16.522	.3558	0.00	-1.24	15.972	.0828
8	7.9443	407.05	0.00	407.05	554.156	540.425	18.141	16.514	.3567	0.00	-1.16	18.773	.0827
9	7.3935	408.03	0.00	408.03	554.328	540.534	18.141	16.607	.3575	0.00	-1.06	20.988	.0827
10	8.0375	408.99	0.00	408.99	554.805	540.945	18.134	16.600	.3582	0.00	-.96	23.651	.0826
11	8.0849	409.95	0.00	409.95	555.280	541.362	18.135	16.595	.3588	0.00	-.85	27.793	.0825
12	8.1527	410.39	0.00	410.39	555.614	541.660	18.135	16.590	.3592	0.00	-.74	33.498	.0824
13	8.2113	410.13	0.00	410.13	555.709	541.771	18.130	16.596	.3589	0.00	-.62	42.288	.0824
14	8.2501	409.73	0.00	409.73	555.800	541.890	18.123	16.583	.3585	0.00	-.49	57.488	.0823
15	8.2835	409.40	0.00	409.40	556.465	542.579	18.11	16.580	.3580	0.00	-.36	90.188	.0822
16	8.3315	407.77	0.00	407.77	557.829	544.053	18.093	16.579	.3561	0.00	-.23	217.045	.0820
17	8.3833	405.92	0.00	405.92	559.265	545.516	18.074	16.579	.3540	0.00	-.08	-464.316	.0818
18	8.4457	403.51	0.00	403.51	558.035	546.541	18.059	16.550	.3517	0.00	.07	-103.550	.0816
19	8.4633	402.24	0.00	402.24	560.053	547.450	18.044	16.552	.3502	0.00	.22	-61.993	.0815
20	8.5447	400.33	0.00	400.33	561.758	549.449	18.039	16.555	.3487	0.00	.37	-43.579	.0814
21	8.6333	394.25	0.00	399.23	562.794	549.585	18.029	16.549	.3470	0.00	.52	-33.305	.0812

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	[illegible]	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.0532	0.0	.3489	397.44	18.144	553.410	1.235	.067	.9264	.9285
2	-7.433	.020	0.000	7.433	.0575	0.0	.3501	399.54	18.144	553.516	1.235	.067	.9234	.9257
3	-7.577	.019	0.000	7.577	.0569	0.0	.3514	401.02	18.143	553.518	1.235	.057	.9207	.9230
4	-7.752	.017	0.000	7.752	.0567	0.0	.3527	402.41	18.143	553.709	1.235	.059	.9182	.9206
5	-7.925	.015	0.000	7.925	[illegible]	0.0	.3538	403.72	18.143	553.791	1.235	.058	.9160	.9185
6	-8.090	.013	0.000	8.090	.0573	0.0	.3548	404.91	18.142	553.871	1.234	.068	.9137	.9163
7	-8.263	.011	0.000	8.263	.0597	0.0	.3558	406.04	18.141	554.017	1.234	.059	.9098	.9125
8	-8.422	.009	0.000	8.422	.0603	0.0	.3567	407.08	18.141	554.150	1.234	.068	.9061	.9089
9	-8.571	.007	0.000	8.571	.0628	0.0	.3575	408.05	18.140	554.328	1.234	.069	.9015	.9044
10	-8.705	.006	0.000	8.705	.0712	0.0	.3582	408.99	18.139	554.805	1.234	.070	.8894	.8927
11	-8.822	.005	0.000	8.822	.0737	0.0	.3585	409.95	18.138	555.230	1.234	.071	.8777	.8813
12	-8.920	.003	0.000	8.920	.0956	0.0	.3592	410.39	18.135	555.614	1.234	.071	.8693	.8731
13	-9.036	.001	0.000	9.036	.0862	0.0	.3589	410.13	18.130	555.706	1.234	.071	.8655	.8694
14	-9.045	-.002	0.000	9.045	.0909	0.0	.3585	409.73	18.123	555.800	1.233	.072	.8617	.8658
15	-9.063	-.004	0.000	9.063	.0943	0.0	.3580	409.40	18.110	556.465	1.233	.073	.8449	.8495
16	-9.053	-.008	0.000	9.053	.1023	0.0	.3561	407.77	18.094	557.829	1.231	.075	.8114	.8169
17	-9.050	-.012	0.000	9.050	.1112	0.0	.3540	405.92	18.079	559.266	1.230	.078	.7786	.7850
18	-9.085	-.016	0.000	9.085	.1209	0.0	.3517	403.61	18.059	560.336	1.229	.080	.7601	.7678
19	-9.125	-.024	0.000	9.125	.1291	0.0	.3502	402.24	18.049	560.553	1.228	.081	.7432	.7505
20	-9.169	-.031	0.000	9.169	.1383	0.0	.3487	400.83	18.039	561.758	1.227	.083	.7255	.7334
21	-9.213	-.033	0.000	9.213	.1599	0.0	.3470	393.25	18.029	562.794	1.227	.085	.7065	.7148

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.233 ISEN. EFF.= .845 POLY. EFF.= .850 DELTA T ON T = .073

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	409.61	0.00	409.61	553.410	539.508	18.144	16.596	.3592	0.00	0.00	0.000	.0828
2	7.6803	409.62	0.00	409.62	553.518	539.615	18.144	16.596	.3592	0.00	-.04	930.222	.0827
3	7.7223	409.65	0.00	409.65	553.618	539.713	18.143	16.596	.3592	0.00	-.07	504.881	.0827
4	7.7646	409.68	0.00	409.68	553.709	539.801	18.143	16.596	.3592	0.00	-.09	367.176	.0827
5	7.8077	409.72	0.00	409.72	553.791	539.881	18.143	16.595	.3592	0.00	-.11	302.048	.0827
6	7.8515	409.74	0.00	409.74	553.871	539.961	18.142	16.595	.3592	0.00	-.13	266.642	.0827
7	7.8951	409.78	0.00	409.78	554.017	540.103	18.141	16.594	.3592	0.00	-.14	246.860	.0827
8	7.9414	409.83	0.00	409.83	554.155	540.239	18.141	16.594	.3592	0.00	-.15	236.895	.0826
9	7.9874	409.88	0.00	409.88	554.328	540.408	18.140	16.593	.3592	0.00	-.15	234.135	.0826
10	8.0341	410.04	0.00	410.04	554.805	540.874	18.133	16.593	.3591	0.00	-.15	237.522	.0825
11	8.0815	410.19	0.00	410.19	555.280	541.339	18.133	16.592	.3591	0.00	-.14	246.958	.0825
12	8.1297	410.14	0.00	410.14	555.614	541.677	18.135	16.592	.3590	0.00	-.14	263.139	.0824
13	8.1745	409.40	0.00	409.40	555.708	541.821	18.130	16.591	.3583	0.00	-.12	287.788	.0824
14	8.2231	408.63	0.00	408.63	555.800	541.965	18.123	16.591	.3576	0.00	-.11	323.731	.0824
15	8.2735	408.04	0.00	408.04	556.465	542.670	18.115	16.590	.3568	0.00	-.10	376.748	.0823
16	8.3237	406.23	0.00	406.23	557.829	544.153	18.095	16.590	.3543	0.00	-.08	457.603	.0820
17	8.3820	404.43	0.00	404.43	559.266	545.716	18.073	16.589	.3527	0.00	-.06	589.211	.0818
18	8.4352	402.26	0.00	402.25	560.036	546.630	18.053	16.589	.3505	0.00	-.04	826.647	.0817
19	8.4893	401.19	0.00	401.19	560.853	547.520	18.043	16.589	.3493	0.00	-.03	1333.787	.0815
20	8.5442	400.23	0.00	400.23	561.755	548.489	18.033	16.589	.3481	0.00	-.01	2385.284	.0814
21	8.6000	399.28	0.00	399.28	562.794	549.588	18.023	16.589	.3470	0.00	0.00	0.000	.0812

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	410.62	0.00	410.62	553.410	539.439	18.144	16.589	.3601	0.00	0.00	0.000	.0827
2	7.6837	410.62	0.00	410.62	553.518	539.547	18.144	16.589	.3601	0.00	-.00	0.000	.0827
3	7.7222	410.62	0.00	410.62	553.618	539.647	18.143	16.589	.3601	0.00	-.00	0.000	.0827
4	7.7645	410.62	0.00	410.62	553.709	539.736	18.143	16.589	.3600	0.00	-.01	0.000	.0827
5	7.8075	410.60	0.00	410.60	553.791	539.821	18.143	16.589	.3600	0.00	-.01	0.000	.0827
6	7.8513	410.55	0.00	410.55	553.871	539.905	18.142	16.589	.3599	0.00	-.01	0.000	.0827
7	7.8953	410.53	0.00	410.53	554.017	540.052	18.141	16.589	.3599	0.00	-.01	0.000	.0826
8	7.9411	410.50	0.00	410.50	554.156	540.193	18.141	16.589	.3598	0.00	-.01	0.000	.0826
9	7.9871	410.47	0.00	410.47	554.328	540.368	18.140	16.589	.3597	0.00	-.01	0.000	.0826
10	8.0333	410.55	0.00	410.55	554.805	540.839	18.133	16.589	.3596	0.00	-.01	0.000	.0825
11	8.0812	410.62	0.00	410.62	555.280	541.309	18.133	16.589	.3595	0.00	-.01	0.000	.0825
12	8.1294	410.50	0.00	410.50	555.614	541.653	18.135	16.589	.3593	0.00	-.01	0.000	.0824
13	8.1792	409.68	0.00	409.68	555.708	541.801	18.130	16.589	.3585	0.00	-.01	0.000	.0824
14	8.2273	408.84	0.00	408.84	555.800	541.950	18.123	16.589	.3577	0.00	-.01	0.000	.0824
15	8.2782	408.20	0.00	408.20	556.465	542.660	18.115	16.589	.3570	0.00	-.01	0.000	.0822
16	8.3235	406.39	0.00	406.39	557.829	544.146	18.093	16.589	.3549	0.00	-.01	0.000	.0820
17	8.3818	404.50	0.00	404.50	559.266	545.711	18.073	16.589	.3527	0.00	-.01	0.000	.0818
18	8.4350	402.30	0.00	402.30	560.036	546.628	18.053	16.589	.3505	0.00	-.01	0.000	.0817
19	8.4892	401.21	0.00	401.21	560.853	547.518	18.043	16.589	.3493	0.00	-.00	0.000	.0815
20	8.5442	400.24	0.00	400.24	561.758	548.488	18.033	16.589	.3481	0.00	-.00	0.000	.0814
21	8.6000	399.28	0.00	399.28	562.794	549.588	18.023	16.589	.3470	0.00	0.00	0.000	.0812

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON P	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.3493	.4574	4.343	8.131	.0557	.3369	.3490	.4919	.8152	.7257	-60.937	-12.647	6.878	10.991
2	6.9549	7.5933	.4943	3.983	8.101	.0595	.3629	.3719	.5022	.7925	.7196	-61.311	-13.533	6.236	10.627
3	6.9737	7.5335	.4723	[illegible]	[illegible]	.0620	.3829	.3909	.5078	.7734	.7132	-61.673	-14.410	6.373	10.115
4	7.0910	7.5947	.4737	[illegible]	[illegible]	.0630	.3996	.4067	.5100	.7574	.7065	-62.008	-15.291	6.418	9.364
5	7.2034	7.7320	[illegible]	[illegible]	7.975	.0637	.4137	.4196	.5097	.7439	.6995	-62.307	-16.181	6.303	8.453
6	7.3144	7.7805	[illegible]	[illegible]	[illegible]	.0642	.4256	.4310	.5076	.7324	.6924	-62.586	-17.053	5.995	7.646
7	7.4245	7.8530	[illegible]	3.873	7.777	[illegible]	.4374	.4419	.5041	.7213	.6865	-62.859	-17.895	5.497	7.064
8	7.5341	[illegible]	[illegible]	[illegible]	7.740	.0684	.4474	.4512	.4936	.7117	.6804	-63.135	-18.648	4.811	6.712
9	7.6430	7.9321	[illegible]	[illegible]	7.705	.0703	.4565	.4597	.4943	.7030	.6749	-63.419	-19.323	3.943	6.660
10	7.7517	[illegible]	[illegible]	7.651	[illegible]	.0781	.4693	.4718	.4883	.6919	.6749	-63.715	-19.928	2.914	6.945
11	7.8602	[illegible]	[illegible]	[illegible]	7.097	[illegible]	.4806	.4827	.4813	.6816	.6747	-64.028	-20.473	1.770	7.521
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4892	.4905	[illegible]	.6740	.6718	-64.359	-20.968	.541	8.081
13	[illegible]	[illegible]	[illegible]	[illegible]	7.373	.0910	.4933	[illegible]	.4671	.6632	.6643	-64.713	-21.395	-.795	9.443
14	8.1677	[illegible]	[illegible]	7.210	7.727	[illegible]	.4964	[illegible]	.4583	.6651	.6569	-65.092	-21.772	-2.269	10.591
15	8.2985	[illegible]	[illegible]	7.118	[illegible]	.1118	.5149	.5137	.4500	[illegible]	.6594	-65.499	-22.076	-3.839	11.719
16	8.4105	8.3215	.5513	7.131	7.734	.1320	.5496	[illegible]	.4410	.6173	.5734	-65.934	-22.295	-5.320	12.769
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.1321	.5565	.5551	.4323	[illegible]	.6577	-66.394	-22.407	-6.412	13.545
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.2135	.6037	.6019	.4237	[illegible]	.6597	-66.867	-22.378	-7.087	13.936
19	[illegible]	[illegible]	[illegible]	[illegible]	9.447	.2293	.6217	.6195	.4154	.5499	.6920	-67.345	-22.181	-7.729	13.892
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.2433	.6419	.6392	.4073	.5302	.6949	-67.828	-21.839	-8.568	13.588
21	9.0000	[illegible]	[illegible]	[illegible]	12.1[illegible]	.2718	.5604	.6533	.4017	.5054	.6992	-68.316	-21.371	-9.687	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON P	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5149	[illegible]	.4321	[illegible]	7.239	.0532	.4165	.4163	.3977	.7312	0.0000	48.817	-7.239	-39.941	.020
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4315	[illegible]	.4137	.7203	0.0000	47.995	-7.403	-36.763	.020
3	[illegible]	[illegible]	[illegible]	[illegible]	7.577	.0509	.4447	.4447	[illegible]	.7111	0.0000	47.256	-7.577	-33.400	.019
4	[illegible]	7.7606	[illegible]	[illegible]	[illegible]	[illegible]	.4546	[illegible]	.4359	.7045	0.0000	46.730	-7.752	-29.974	.017
5	[illegible]	7.8103	.5117	[illegible]	[illegible]	[illegible]	.4623	[illegible]	.4412	.7005	0.0000	46.315	-7.926	-26.536	.015
6	7.8733	[illegible]	.5143	-5.172	[illegible]	.0573	.4677	.4579	.4437	.6993	0.0000	45.968	-8.096	-23.138	.013
7	7.9130	[illegible]	.5173	[illegible]	8.253	.0587	.4721	.4723	.4439	.6972	0.0000	45.648	-8.263	-19.834	.011
8	[illegible]	[illegible]	.5197	[illegible]	8.422	.0603	.4752	.4754	.4425	.6971	0.0000	45.346	-8.422	-16.559	.009
9	[illegible]	[illegible]	[illegible]	[illegible]	8.571	.0528	.4774	.4770	.4336	.6975	0.0000	45.074	-8.571	-13.114	.008
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0712	.4815	[illegible]	.4329	.6967	0.0000	44.345	-8.705	-9.326	.006
11	[illegible]	[illegible]	.5224	[illegible]	[illegible]	.0797	.4845	[illegible]	.4255	.6964	0.0000	44.684	-8.822	-5.338	.005
12	8.1373	8.1327	[illegible]	-3.797	[illegible]	[illegible]	.4852	.4353	[illegible]	.5974	0.0000	44.621	-8.920	-1.400	.003
13	[illegible]	[illegible]	.5201	[illegible]	[illegible]	.0832	[illegible]	[illegible]	[illegible]	.5995	0.0000	44.669	-8.996	1.952	.001
14	8.2205	8.2305	[illegible]	[illegible]	[illegible]	.0909	.4810	.4310	[illegible]	.7019	0.0000	44.794	-9.046	5.410	-.002
15	8.2725	[illegible]	[illegible]	[illegible]	[illegible]	.0943	.4802	.4301	.4010	.7045	0.0000	44.945	-9.063	9.725	-.004
16	8.3201	8.3315	.5113	-1.474	[illegible]	.1023	.4838	.4337	.3925	.7050	0.0000	45.113	-9.059	15.603	-.008
17	8.3705	[illegible]	[illegible]	.321	[illegible]	[illegible]	.4857	.4355	.3815	.7078	0.0000	45.455	-9.060	22.675	-.012
18	8.4241	[illegible]	[illegible]	1.051	9.035	.1209	.4815	.4313	.3659	.7120	0.0000	46.181	-9.085	30.026	-.010
19	[illegible]	[illegible]	[illegible]	1.727	9.125	.1231	.4715	.4715	.3467	.7211	0.0000	47.346	-9.125	36.836	-.024
20	[illegible]	[illegible]	.4793	[illegible]	9.159	.1389	.4570	.4571	.3134	.7341	0.0000	48.876	-9.169	42.541	-.031
21	8.5139	[illegible]	[illegible]	[illegible]	9.213	.1509	.4383	.4385	.2643	.7509	0.0000	50.814	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	.3	.7	1.0	1.4	1.6	3.4	3.0	5.0	7.0	8.0	9.1	10.3	10.4
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.5	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	.3	.7	1.0	1.4	1.9	3.5	3.0	5.0	7.0	8.0	9.1	10.3	10.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 20

TEST POINT TITLE = 212050315040

FLOW = 10.22 RPM/0 = 8154.2 PRESSURE RATIO = 1.233 ISENTROPIC EFFY = .8453 POLYTROPIC EFFY = .8499 DEL T/T = .0727

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	ISEN EFFY	----STAGE---- PRESSURE RATIO	ISEN EFFY	FLOW/ (CHOKE FLOW)
1	2120503150+0	CONVERGED AFTER 20 PASSES	10.219	8154.2	1.250	.904	1.233	.845	.26789

2. TEST POINT 212050615050 (50%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0636	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1585	0.00	20.93	0.000	.0753
2	6.2259	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	19.74	0.000	.0753
3	6.3536	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	18.54	0.000	.0753
4	6.5343	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	17.33	0.000	.0753
5	6.6933	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	16.12	0.000	.0753
6	6.8473	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	14.90	0.000	.0753
7	6.9939	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	13.68	0.000	.0753
8	7.1517	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	12.47	0.000	.0753
9	7.3023	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	11.26	0.000	.0753
10	7.4532	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	10.07	0.000	.0753
11	7.6032	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	8.89	0.000	.0753
12	7.7525	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	7.74	0.000	.0753
13	7.9019	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	6.61	0.000	.0753
14	8.0513	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	5.53	0.000	.0753
15	8.1995	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	4.50	0.000	.0753
16	8.3490	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	3.53	0.000	.0753
17	8.4955	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	2.63	0.000	.0753
18	8.6446	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	1.81	0.000	.0753
19	8.7932	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	1.09	0.000	.0753
20	8.9415	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	.48	0.000	.0753
21	9.0900	177.08	0.00	177.08	518.688	516.088	14.695	14.440	.1583	0.00	0.00	0.000	.0753

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	191.49	0.00	191.49	518.688	515.647	14.695	14.397	.1713	0.00	20.83	-205.758	.0751
2	6.5133	192.37	0.00	192.37	518.688	515.619	14.695	14.394	.1723	0.00	19.59	-136.622	.0751
3	6.6519	193.16	0.00	193.16	518.688	515.594	14.695	14.391	.1733	0.00	18.35	-109.453	.0751
4	6.7899	193.93	0.00	193.93	518.688	515.571	14.695	14.389	.1739	0.00	17.11	-93.967	.0751
5	6.9249	194.53	0.00	194.53	518.688	515.550	14.695	14.387	.1745	0.00	15.87	-82.927	.0751
6	7.0531	195.10	0.00	195.10	518.688	515.531	14.695	14.385	.1750	0.00	14.62	-73.836	.0751
7	7.1846	195.59	0.00	195.59	518.688	515.515	14.695	14.384	.1755	0.00	13.37	-65.738	.0751
8	7.3233	195.93	0.00	195.93	518.688	515.503	14.695	14.382	.1758	0.00	12.12	-55.387	.0751
9	7.4621	196.26	0.00	196.26	518.688	515.494	14.695	14.382	.1761	0.00	10.87	-51.473	.0751
10	7.5933	196.41	0.00	196.41	518.688	515.489	14.695	14.381	.1762	0.00	9.62	-45.253	.0751
11	7.7233	196.40	0.00	196.40	518.688	515.489	14.695	14.381	.1762	0.00	8.38	-39.670	.0751
12	7.8614	196.23	0.00	196.23	518.688	515.495	14.695	14.382	.1760	0.00	7.15	-34.725	.0751
13	7.9947	195.89	0.00	195.89	518.688	515.506	14.695	14.383	.1757	0.00	5.95	-30.390	.0751
14	8.1253	195.33	0.00	195.33	518.688	515.524	14.695	14.385	.1752	0.00	4.78	-26.610	.0751
15	8.2525	194.59	0.00	194.59	518.688	515.549	14.695	14.387	.1745	0.00	3.64	-23.320	.0751
16	8.3974	193.57	0.00	193.57	518.688	515.581	14.695	14.390	.1736	0.00	2.55	-20.457	.0751
17	8.5332	192.33	0.00	192.33	518.688	515.621	14.695	14.394	.1725	0.00	1.51	-17.964	.0751
18	8.6731	190.83	0.00	190.83	518.688	515.668	14.695	14.399	.1712	0.00	.54	-15.756	.0751
19	8.8084	189.05	0.00	189.05	518.688	515.724	14.695	14.404	.1696	0.00	-.36	-13.811	.0751
20	8.9433	186.97	0.00	186.97	518.688	515.789	14.695	14.410	.1677	0.00	-1.18	-12.077	.0752
21	9.0900	184.56	0.00	184.56	518.688	515.863	14.695	14.418	.1655	0.00	-1.91	-10.518	.0752

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	207.02	0.00	207.32	518.688	515.106	14.696	14.344	.1865	0.00	20.54	-83.831	.0749
2	6.7233	208.59	0.00	208.89	518.688	515.069	14.696	14.340	.1875	0.00	19.33	-156.130	.0749
3	6.8437	210.07	0.00	210.07	518.688	515.029	14.696	14.336	.1885	0.00	18.11	-336.795	.0749
4	6.9710	211.23	0.00	211.23	518.688	514.986	14.696	14.332	.1896	0.00	16.87	-856.689	.0749
5	7.0920	212.50	0.00	212.50	518.688	514.943	14.696	14.328	.1907	0.00	15.60	-1289.066	.0749
6	7.2133	213.67	0.00	213.67	518.688	514.902	14.696	14.324	.1919	0.00	14.31	-587.153	.0748
7	7.3339	214.75	0.00	214.75	518.688	514.864	14.696	14.320	.1925	0.00	13.00	-257.823	.0748
8	7.4535	215.53	0.00	215.53	518.688	514.830	14.696	14.317	.1936	0.00	11.66	-137.916	.0748
9	7.5724	216.45	0.00	216.45	518.688	514.803	14.696	14.314	.1943	0.00	10.30	-85.014	.0748
10	7.6921	216.99	0.00	216.99	518.688	514.783	14.696	14.312	.1948	0.00	8.92	-57.760	.0748
11	7.8112	217.25	0.00	217.25	518.688	514.773	14.696	14.311	.1950	0.00	7.52	-42.063	.0748
12	7.9306	217.24	0.00	217.24	518.688	514.774	14.696	14.311	.1950	0.00	6.13	-32.218	.0748
13	8.0492	216.88	0.00	216.88	518.688	514.787	14.696	14.313	.1947	0.00	4.73	-25.639	.0748
14	8.1705	216.17	0.00	216.17	518.688	514.813	14.696	14.315	.1940	0.00	3.34	-21.039	.0748
15	8.2915	215.09	0.00	215.09	518.688	514.851	14.696	14.319	.1931	0.00	1.97	-17.699	.0748
16	8.4133	213.53	0.00	213.53	518.688	514.903	14.696	14.324	.1917	0.00	.63	-15.208	.0748
17	8.5373	211.73	0.00	211.73	518.688	514.969	14.696	14.330	.1901	0.00	-.68	-13.300	.0749
18	8.6075	209.54	0.00	209.54	518.688	515.047	14.696	14.338	.1881	0.00	-1.95	-11.793	.0749
19	8.7394	206.93	0.00	206.93	518.688	515.137	14.696	14.347	.1857	0.00	-3.17	-10.573	.0749
20	8.9165	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	-4.35	-9.560	.0750
21	9.0500	200.58	0.00	200.58	518.688	515.352	14.696	14.368	.1800	0.00	-5.47	-8.690	.0750

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	222.41	0.00	222.41	518.688	514.586	14.696	14.293	.1997	0.00	20.32	-384.054	.0747
2	6.8651	224.62	0.00	224.62	518.688	514.504	14.696	14.285	.2017	0.00	19.26	518.906	.0747
3	6.9741	226.90	0.00	226.90	518.688	514.419	14.696	14.277	.2039	0.00	18.13	173.376	.0747
4	7.0922	229.19	0.00	229.19	518.688	514.332	14.696	14.268	.2058	0.00	16.94	127.034	.0746
5	7.2042	231.45	0.00	231.45	518.688	514.245	14.696	14.260	.2079	0.00	15.69	117.527	.0746
6	7.3144	233.54	0.00	233.54	518.688	514.161	14.696	14.252	.2099	0.00	14.37	136.885	.0746
7	7.4257	235.57	0.00	235.57	518.688	514.082	14.696	14.244	.2117	0.00	12.99	235.285	.0745
8	7.5353	237.47	0.00	237.47	518.688	514.012	14.696	14.237	.2133	0.00	11.55	-2088.093	.0745
9	7.6444	238.97	0.00	238.97	518.688	513.952	14.696	14.232	.2147	0.00	10.05	-130.037	.0745
10	7.7531	240.11	0.00	240.11	518.688	513.907	14.696	14.227	.2157	0.00	8.50	-71.858	.0745
11	7.8615	240.55	0.00	240.55	518.688	513.877	14.696	14.224	.2164	0.00	6.93	-45.656	.0745
12	7.9703	241.14	0.00	241.14	518.688	513.866	14.696	14.223	.2167	0.00	5.33	-32.637	.0745
13	8.0794	240.94	0.00	240.34	518.688	513.874	14.696	14.224	.2165	0.00	3.70	-24.655	.0745
14	8.1881	240.22	0.00	240.22	518.688	513.903	14.696	14.227	.2153	0.00	2.08	-19.697	.0745
15	8.2997	238.94	0.00	238.34	518.688	513.953	14.696	14.232	.2147	0.00	.45	-16.239	.0745
16	8.4116	237.12	0.00	237.12	518.688	514.025	14.696	14.239	.2130	0.00	-1.13	-14.005	.0745
17	8.5250	234.80	0.00	234.80	518.688	514.116	14.696	14.247	.2109	0.00	-2.67	-12.588	.0746
18	8.6413	232.05	0.00	232.05	518.688	514.223	14.696	14.258	.2084	0.00	-4.15	-11.614	.0746
19	8.7578	228.90	0.00	228.90	518.688	514.343	14.696	14.269	.2056	0.00	-5.58	-10.919	.0746
20	8.8775	225.41	0.00	225.41	518.688	514.475	14.696	14.282	.2024	0.00	-6.95	-10.467	.0747
21	9.0000	221.65	0.00	221.65	518.688	514.614	14.696	14.296	.1930	0.00	-8.25	-10.317	.0747

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	5.070	-69.579	3.742	0.0000	600.6	.5750	640.44	17.884	548.587	1.000	0.000	1.0000	1.0000
2	-61.310	6.236	-69.910	3.500	0.0000	610.8	.5844	650.82	18.001	549.615	1.000	0.000	1.0000	1.0000
3	-61.670	5.373	-69.928	3.253	0.0000	621.0	.5937	661.13	18.120	550.551	1.000	0.000	1.0000	1.0000
4	-62.004	6.418	-70.039	3.034	0.0000	631.0	.6029	671.36	18.241	551.694	1.000	0.000	1.0000	1.0000
5	-[illegible].304	4.302	-70.146	7.842	0.0000	641.0	.6121	681.51	18.363	552.744	1.000	0.000	1.0000	1.0000
6	-[illegible].382	5.932	-70.254	7.671	0.0000	650.9	.6212	691.55	18.487	553.803	1.000	0.000	1.0000	1.0000
7	-[illegible].856	5.431	-70.359	7.513	0.0000	660.7	.6301	701.47	18.612	554.869	1.000	0.000	1.0000	1.0000
8	-[illegible].132	4.803	-70.436	7.364	0.0000	670.5	.6390	711.27	18.738	555.945	1.000	0.000	1.0000	1.0000
9	-[illegible].417	3.931	-70.541	7.224	0.0000	680.2	.6477	720.92	18.857	557.030	1.000	0.000	1.0000	1.0000
10	-63.714	2.901	-70.303	7.094	0.0000	689.8	.6563	730.43	18.998	558.128	1.000	0.000	1.0000	1.0000
11	-64.027	1.735	-71.000	6.973	0.0000	699.5	.6647	739.60	19.131	559.240	1.000	0.000	1.0000	1.0000
12	-64.360	.524	-71.220	5.861	0.0000	709.2	.6730	749.04	19.266	560.368	1.000	0.000	1.0000	1.0000
13	-64.714	-.813	-71.471	5.756	0.0000	718.9	.6812	758.17	19.403	561.516	1.000	0.000	1.0000	1.0000
14	-65.094	-2.287	-71.753	6.653	0.0000	728.6	.6893	767.20	19.547	562.686	1.000	0.000	1.0000	1.0000
15	-65.502	-3.856	-72.070	5.569	0.0000	738.5	.6973	776.16	19.693	563.882	1.000	0.000	1.0000	1.0000
16	-65.935	-3.333	-72.420	6.483	0.0000	748.4	.7053	785.09	19.844	565.108	1.000	0.000	1.0000	1.0000
17	-66.398	-5.419	-72.330	6.402	0.0000	758.5	.7133	794.03	19.999	566.367	1.000	0.000	1.0000	1.0000
18	-66.871	-7.031	-73.204	5.333	0.0000	768.8	.7213	803.03	20.150	567.665	1.000	0.000	1.0000	1.0000
19	-67.349	-7.732	-73.630	6.281	0.0000	779.2	.7294	812.15	20.328	569.004	1.000	0.000	1.0000	1.0000
20	-67.830	-3.570	-74.073	6.244	0.0000	789.9	.7376	821.42	20.502	570.389	1.000	0.000	1.0000	1.0000
21	-68.316	-9.607	-74.528	5.212	0.0000	800.8	.7460	830.69	20.683	571.823	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8979	255.22	104.71	275.87	529.345	523.035	15.724	15.078	.2457	22.31	22.32	6.199	.0776
2	7.0050	258.38	101.85	277.73	529.215	522.820	15.711	15.056	.2474	21.51	20.94	7.497	.0775
3	7.1106	261.54	99.47	279.81	529.124	522.633	15.701	15.037	.2493	20.82	19.50	9.436	.0774
4	7.2147	264.82	97.59	282.23	529.076	522.472	15.695	15.021	.2515	20.23	18.00	12.530	.0773
5	7.3174	268.26	95.15	284.97	529.069	522.336	15.695	15.007	.2540	19.72	16.46	17.868	.0773
6	7.4195	271.70	95.05	287.85	529.093	522.223	15.697	14.996	.2565	19.28	14.88	28.252	.0773
7	7.5133	274.98	94.20	290.67	529.138	522.133	15.704	14.988	.2591	18.91	13.26	53.924	.0772
8	7.6170	277.98	93.49	293.28	529.195	522.064	15.710	14.981	.2614	18.59	11.60	185.680	.0772
9	7.7147	280.55	92.96	295.55	529.269	522.027	15.715	14.977	.2635	18.33	9.92	-241.111	.0772
10	7.8117	282.45	92.53	297.31	529.387	522.058	15.724	14.974	.2650	18.19	8.22	-97.348	.0772
11	7.9034	283.80	92.57	298.51	529.489	522.101	15.725	14.973	.2661	18.06	6.52	-74.462	.0772
12	8.0051	284.56	92.00	299.07	529.554	522.138	15.730	14.972	.2666	17.92	4.81	-71.066	.0772
13	8.1020	284.71	91.03	298.92	529.575	522.157	15.730	14.973	.2664	17.74	3.10	-78.540	.0771
14	8.1995	284.14	89.90	298.02	529.564	522.200	15.725	14.973	.2655	17.56	1.38	-99.706	.0771
15	8.2979	282.28	89.64	296.17	529.663	522.390	15.717	14.974	.2639	17.62	-.33	-152.272	.0771
16	8.3950	279.28	90.02	293.43	529.842	522.704	15.704	14.975	.2614	17.87	-1.99	-333.569	.0771
17	8.5000	275.57	90.10	289.92	529.968	523.019	15.685	14.977	.2582	18.11	-3.58	20136.037	.0770
18	8.6043	271.57	88.93	285.85	529.978	523.204	15.670	14.980	.2545	18.13	-5.12	485.224	.0770
19	8.7112	267.20	87.73	281.23	529.964	523.407	15.651	14.983	.2504	18.18	-6.60	371.034	.0770
20	8.8210	262.19	86.54	276.10	529.951	523.631	15.630	14.987	.2458	18.27	-8.03	539.994	.0770
21	8.9340	256.65	85.33	270.43	529.944	523.878	15.603	14.991	.2407	18.40	-9.38	-1665.883	.0770

BLADE [illegible]

STAT-ION	BLADE ANGLES	[illegible]	[illegible]	[illegible]	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	.3130	513.7	.5372	[illegible]	17.371	[illegible]	1.070	.021	.9491	.9496
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	523.3	[illegible]	[illegible]	18.053	[illegible]	1.069	.020	.9483	.9488
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	532.7	.5291	[illegible]	[illegible]	[illegible]	[illegible]	.020	.9478	.9483
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.020	.9476	.9481
5	[illegible]	[illegible]	[illegible]	[illegible]	.0162	551.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.020	.9478	.9482
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.020	.9482	.9487
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5073	637.14	[illegible]	[illegible]	1.069	.020	.9490	.9495
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5266	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.9500	.9505
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.020	.9498	.9502
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.021	[illegible]	.9453
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.021	.9399	.9405
12	[illegible]	[illegible]	[illegible]	[illegible]	.3175	[illegible]	[illegible]	[illegible]	[illegible]	.00.733	1.070	.021	.9363	.9369
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.3161	691.17	[illegible]	[illegible]	[illegible]	.021	.9339	.9346
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.021	.9314	.9320
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	707.43	[illegible]	[illegible]	[illegible]	.021	.9153	.9161
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.8893	.8903
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.3421	[illegible]	[illegible]	[illegible]	1.067	[illegible]	[illegible]	.8653
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.022	.8496	.8510
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	737.43	[illegible]	[illegible]	[illegible]	[illegible]	.8343	.8357
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.3639	[illegible]	20.14	[illegible]	[illegible]	.022	.8176	.8192
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.3714	[illegible]	[illegible]	[illegible]	[illegible]	.022	.7992	.8009

STAGE [illegible] PRESSURE RATIO = 1.063 ISEN. EFF. = .910 POLY. EFF. = [illegible] DELTA T ON T = .021

STATION [illegible] FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITY [illegible]	[illegible]	TOTAL	TEMPERATURE TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.23	[illegible]	[illegible]	.0793
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0793
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.76	[illegible]	.0792
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-133.980	.0792
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.520	.3207	[illegible]	[illegible]	-72.137	.0791
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29.91	[illegible]	-51.179	.0791
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.508	[illegible]	[illegible]	13.20	-41.825	.0791
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.30	[illegible]	.0790
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.3273	[illegible]	[illegible]	-35.458	.0790
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.438	[illegible]	[illegible]	[illegible]	[illegible]	.0790
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28.33	[illegible]	[illegible]	.0790
12	[illegible]	[illegible]	[illegible]	371.[illegible]	331.498	325.354	[illegible]	[illegible]	[illegible]	[illegible]	4.35	[illegible]	.0790
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	323.150	[illegible]	[illegible]	.3267	[illegible]	2.69	-43.471	.0790
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	323.301	[illegible]	[illegible]	[illegible]	[illegible]	1.64	-51.690	.0790
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.23	[illegible]	-65.346	.0790
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.540	.3216	26.95	-2.14	-95.512	.0790
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	330.249	[illegible]	15.553	.3176	28.70	-3.65	-163.332	.0789
18	[illegible]	[illegible]	[illegible]	[illegible]	341.121	330.732	[illegible]	15.563	.3133	30.08	[illegible]	-573.079	.0789
19	[illegible]	[illegible]	[illegible]	[illegible]	341.314	331.296	15.643	15.587	[illegible]	30.54	-6.56	656.208	.0789
20	[illegible]	[illegible]	[illegible]	342.35	[illegible]	331.329	[illegible]	15.606	[illegible]	31.09	-7.98	357.214	.0790
21	[illegible]	[illegible]	[illegible]	[illegible]	341.774	332.461	[illegible]	15.625	[illegible]	31.77	-3.38	1565.883	.0790

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.438	-55.514	3.103	.0333	629.8	.4659	526.94	18.035	551.566	1.136	.039	.9455	.9464
2	-53.093	2.235	-55.333	2.304	.0335	636.1	.4773	533.65	18.135	552.433	1.135	.039	.9452	[illegible]
3	-53.542	1.617	-55.330	[illegible]	.0345	646.2	.4874	549.52	18.235	553.296	1.135	.039	[illegible]	[illegible]
4	-54.142	1.004	[illegible]	[illegible]	.0335	654.2	.4971	560.76	18.335	554.157	[illegible]	.039	[illegible]	[illegible]
5	[illegible]	[illegible]	-55.415	2.318	[illegible]	662.0	.5064	571.26	18.436	555.015	[illegible]	.039	[illegible]	[illegible]
6	-55.003	[illegible]	-57.147	2.135	[illegible]	669.9	.5154	581.38	18.537	555.872	[illegible]	.039	[illegible]	[illegible]
7	-55.357	-.314	-57.331	1.974	[illegible]	677.5	.5241	591.14	18.699	556.723	1.135	[illegible]	[illegible]	[illegible]
8	-55.745	-.306	-57.573	1.833	.0241	685.1	.5325	600.51	18.802	557.586	1.136	.039	.9473	[illegible]
9	-56.092	-.232	-57.312	1.721	.0237	692.6	.5402	609.27	18.903	558.446	1.136	.039	[illegible]	[illegible]
10	-56.434	-.139	-58.076	1.642	.0312	700.1	.5468	616.70	18.991	559.313	1.137	.040	[illegible]	[illegible]
11	-56.780	.066	-58.335	1.603	.0335	707.5	.5531	623.93	19.080	560.168	1.137	.040	[illegible]	[illegible]
12	-57.135	.379	-58.745	1.513	.0350	715.2	.5595	631.25	19.175	561.075	1.137	.040	.9323	[illegible]
13	-57.505	.779	-59.171	1.666	.0356	722.7	.5661	639.73	19.276	561.975	1.137	.040	[illegible]	[illegible]
14	-57.895	1.243	[illegible]	1.762	.0362	730.3	.5726	645.11	19.380	562.992	1.137	.040	[illegible]	[illegible]
15	-58.320	1.737	-60.215	[illegible]	.0442	738.1	.5762	650.53	19.446	563.832	1.137	.041	[illegible]	[illegible]
16	-58.779	2.328	-60.354	2.075	.0576	746.0	.5778	652.73	19.483	564.802	1.136	.042	[illegible]	[illegible]
17	-59.277	3.015	-61.572	2.295	.0702	754.1	.5795	655.14	19.526	565.809	1.135	.043	[illegible]	[illegible]
18	-59.804	3.735	-62.355	2.554	.0761	762.4	.5838	660.30	19.610	566.556	1.134	.043	[illegible]	[illegible]
19	-60.355	4.412	-63.231	2.945	.0622	771.0	.5881	665.46	19.697	567.346	1.133	.044	[illegible]	[illegible]
20	-60.933	4.750	-64.033	3.100	.0837	779.5	.5923	670.53	19.796	569.084	1.131	.044	[illegible]	[illegible]
21	-61.549	4.913	-65.030	3.510	.0954	789.0	.5904	675.61	19.876	570.276	1.130	.045	.7978	.8013

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.135 ISEN. EFF.= .906 POLY. EFF.= .907 DELTA T ON T = .041

STATION 7 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	375.05	254.63	453.04	547.041	529.577	17.517	15.535	.4063	35.21	24.87	[illegible]	[illegible]
2	7.3349	379.35	250.12	453.37	546.049	529.312	17.495	15.606	.4072	34.44	22.60	[illegible]	[illegible]
3	7.4142	382.94	250.42	450.85	546.732	529.128	17.483	15.589	.4081	33.81	20.39	-31.244	[illegible]
4	7.4833	385.91	253.25	451.50	[illegible]	529.003	17.475	15.577	.4088	33.25	18.24	-21.947	[illegible]
5	7.5614	388.44	250.43	452.20	[illegible]	528.920	17.473	15.569	.4094	32.82	16.16	-18.645	[illegible]
6	7.6339	390.64	248.02	[illegible]	546.617	528.871	17.473	15.565	.4099	32.41	14.16	-17.438	[illegible]
7	7.7029	392.61	245.84	453.22	546.632	528.848	17.477	15.565	.4103	32.05	12.24	-17.326	[illegible]
8	7.7775	394.24	243.85	453.55	546.664	528.854	17.483	15.567	.4105	31.74	10.40	-18.013	[illegible]
9	7.8492	395.20	242.26	453.54	546.738	528.929	17.489	15.573	.4105	31.51	8.62	-19.409	[illegible]
10	7.9210	394.53	241.64	452.43	546.945	529.190	17.491	15.582	.4095	31.50	6.92	-21.565	[illegible]
11	7.9932	393.50	241.23	461.55	547.130	529.474	17.491	15.593	.4086	31.51	5.27	[illegible]	[illegible]
12	8.0560	391.97	[illegible]	459.54	547.249	529.739	17.483	15.606	.4063	31.48	3.67	[illegible]	[illegible]
13	8.1390	390.02	235.25	457.03	547.293	529.981	17.494	15.622	.4044	31.42	2.11	[illegible]	[illegible]
14	8.2140	387.31	235.20	453.06	547.307	530.250	17.475	15.641	.4013	31.38	.57	-45.337	[illegible]
15	8.2839	381.07	237.55	449.05	547.735	531.024	17.459	15.663	.3969	31.94	-.94	-58.333	[illegible]
16	8.3650	371.31	241.66	443.53	548.517	532.214	17.439	15.689	.3915	33.01	-2.41	[illegible]	[illegible]
17	8.4430	362.11	245.65	437.55	549.303	533.435	17.413	15.718	.3859	34.15	-3.81	-118.197	[illegible]
18	8.5327	354.20	245.33	431.44	549.691	534.265	17.403	15.751	.3802	34.82	-5.19	-201.581	[illegible]
19	8.6133	345.31	247.42	425.20	550.144	535.161	17.392	15.788	.3744	35.58	-6.57	[illegible]	[illegible]
20	8.7059	337.05	249.17	419.15	550.697	536.137	17.395	15.828	.3657	36.47	-7.96	[illegible]	[illegible]
21	8.8013	327.36	251.75	413.35	551.373	537.213	17.384	15.870	.3533	37.52	-9.37	**********	.0795

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	CHAN	R-Z FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.423	1.512	-45.445	5.378	.0551	645.1	.4735	534.95	18.229	553.293	1.192	.055	.9406	.9421
2	-41.127	1.255	[illegible]	4.375	.0535	653.0	.4835	546.12	18.314	554.029	1.191	.054	.9403	.9417
3	-41.799	.737	-45.4 1	4.372	.0513	659.7	.4924	556.11	18.339	554.757	1.190	.054	.9401	.9416
4	-42.4[illegible]	-.073	[illegible]	4.313	.0503	666.3	.5006	565.25	18.434	555.481	1.189	.054	.9401	.9416
5	-43.[illegible]47	-.313	-47.331	4.344	.0487	672.5	.5082	573.78	18.5[illegible]	556.203	1.189	.054	.9404	.9418
6	-43.[illegible]37	-1.23[illegible]	[illegible]	[illegible]	.0471	679.2	.5153	581.84	18.5[illegible]	556.926	1.189	.054	.9407	.9422
7	-44.133	-1.1[illegible]	-45.24[illegible]	[illegible]	.0453	685.5	.5222	589.55	18.7[illegible]3	557.650	1.189	.054	.9414	.9429
8	-44.7[illegible]	[illegible]	[illegible]	3.[illegible]	.0436	692.0	.5287	596.69	18.831	558.375	1.190	.054	.9423	.9437
9	-45.[illegible]11	-.33[illegible]	[illegible]	3.853	.0433	698.4	.5345	603.51	18.915	559.112	1.190	.054	.9417	.9431
10	-45.7[illegible]2	.211	[illegible]	3.322	.0467	704.9	.5396	609.31	18.991	559.854	1.190	.054	.9356	.9371
11	-46.135	.471	[illegible]	3.875	.0502	711.2	.5426	612.95	19.049	560.608	1.190	.055	.9295	.9313
12	-46.5[illegible]1	1.9[illegible]	[illegible]	3.9[illegible]	.05[illegible]	717.7	.5458	617.63	19.123	561.374	1.190	.055	.9250	.9268
13	-47.152	2.975	-51.2[illegible]1	4.05[illegible]	.053[illegible]	724.2	.5513	623.13	19.205	562.156	1.190	.055	.92[illegible]	.9239
14	-47.563	4.153	-51.3[illegible]	4.2[illegible]	.0543	730.8	.5557	628.24	19.231	562.954	1.19[illegible]	.055	[illegible]	.9209
15	-4[illegible].177	[illegible]	-52.[illegible]	4.[illegible]13	.0663	737.6	.5557	628.70	19.313	563.775	1.186	.056	.9003	.9027
16	[illegible]12	5.7[illegible]5	-53.51[illegible]	4.9[illegible]3	.0953	744.5	.5523	625.47	19.331	564.628	1.187	.058	.8704	.8735
17	-4[illegible].[illegible]57	7.936	[illegible]	5.1[illegible]	.1053	751.8	.5455	622.33	19.283	565.521	1.185	.059	.8423	.8461
18	[illegible]	4.14[illegible]	[illegible]	5.[illegible]	.1142	759.2	.5493	623.30	19.336	566.453	1.184	.060	.8274	.8315
19	[illegible]57	.95[illegible]	-55.349	5.932	.1233	765.9	.5495	624.06	19.393	567.426	1.183	.061	.8122	.8166
20	[illegible].476	10.519	-57.334	[illegible]	.1330	774.9	.5494	624.48	19.430	568.44[illegible]	1.183	.062	.7964	.8012
21	[illegible].561	10.530	-54.327	[illegible]	.1433	783.2	.5498	624.40	19.474	569.512	1.183	.063	.7798	.7849

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.189 ISEN. EFF.= .896 POLY. EFF.= .898 DELTA T ON T = .055

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4492	476.33	330.58	5[illegible]7.45	5[illegible]8.515	528.732	19.731	15.494	.5243	37.13	19.79	-2.220	.0788
2	7.50[illegible]	469.51	[illegible]	[illegible]	[illegible].744	529.015	19.601	15.585	.5248	37.62	17.74	-2.474	.0792
3	7.55[illegible]	463.[illegible]	3[illegible]3.3[illegible]	[illegible]	[illegible].165	530.433	19.951	15.669	.5208	38.06	15.82	-2.786	.0795
4	7.61[illegible]	458.33	[illegible]	[illegible].15	[illegible].549	531.175	19.837	15.747	.5172	38.44	14.03	-3.171	.0798
5	7.6[illegible]	453.71	[illegible].93	[illegible]	[illegible]	[illegible]	19.957	15.917	.5138	38.74	12.34	-3.645	.0800
6	7.72[illegible]	449.75	[illegible]	[illegible]	[illegible].158	532.430	19.972	15.880	.5107	38.97	10.75	-4.230	.0802
7	7.7[illegible]	[illegible]	353.33	575.72	550.419	532.953	19.00[illegible]	15.937	.5053	39.13	9.24	-4.961	.0805
8	7.8[illegible]33	444.91	352.[illegible]	573.35	550.664	533.420	19.033	15.990	.5037	39.25	7.79	-5.889	.0806
9	7.8855	441.35	[illegible]	[illegible]71.[illegible]	550.935	533.916	19.067	16.038	.5034	39.33	6.41	-7.100	.0808
10	7.95[illegible]7	437.11	[illegible]	[illegible]	551.351	534.592	19.09[illegible]	16.084	.5007	39.72	5.06	-8.705	.0809
11	8.0[illegible]	432.92	[illegible]	[illegible]	551.737	535.248	19.102	16.127	.4973	40.03	3.75	-10.857	.0811
12	8.0[illegible]	428.[illegible]	[illegible]	[illegible]	552.045	535.839	19.115	16.170	.4943	40.26	2.45	-13.873	.0812
13	8.15[illegible]1	425.77	[illegible]	539.21	552.274	535.364	19.123	16.213	.4913	40.41	1.17	-18.471	.0813
14	8.2162	420.13	361.45	[illegible]	552.484	536.897	19.139	16.257	.4885	40.57	-.12	-26.284	.0815
15	8.2313	413.55	[illegible]	537.17	553.261	538.092	19.135	16.303	.4840	41.46	-1.42	-40.964	.0815
16	8.3[illegible]2	[illegible]	372.[illegible]	[illegible].25	554.552	539.542	19.131	16.352	.4793	43.00	-2.72	-70.189	.0815
17	8.4215	38[illegible].71	[illegible]	541.32	555.964	541.535	19.133	16.406	.4743	44.62	-4.00	-123.293	.0815
18	8.4[illegible]50	375.53	[illegible]	[illegible].42	555.905	542.891	19.152	16.465	.4737	45.63	-5.30	-241.924	.0816
19	8.5730	367.11	391.04	535.53	557.997	544.231	19.193	16.527	.4677	46.73	-6.63	-436.982	.0817
20	8.6523	357.41	396.45	533.77	563.273	545.673	19.243	16.593	.4655	47.96	-7.99	-676.477	.0818
21	8.7359	347.08	4[illegible].17	532.74	570.752	547.244	19.339	16.662	.4633	49.35	-9.37	***********	.0819

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	[illegible]	-32.355	8.241	.0738	662.8	.4997	564.06	18.374	555.099	1.276	.076	.9426	.9465
2	-25.00	[illegible]	-33.063	8.067	.0714	667.7	.4960	560.38	18.437	555.539	1.279	.077	.9432	[illegible]
3	-25.840	.642	-33.733	7.892	.0692	672.6	.4930	557.46	18.501	556.187	1.283	.078	.9438	.9458
4	-26.678	.072	-34.401	7.723	.0670	677.6	.4909	555.48	18.567	556.745	1.286	.079	.9445	.9464
5	-27.518	1.404	-35.032	7.565	.0648	682.7	.4897	554.44	18.635	557.313	1.289	.079	.9451	.9471
6	-28.341	1.102	-35.766	7.425	.0626	687.8	.4893	554.32	18.704	557.892	1.291	.080	.9459	.9477
7	-29.117	1.217	-36.427	7.311	.0603	692.9	.4897	555.05	18.776	558.482	1.293	.080	.9467	[illegible]
8	-29.835	1.563	-37.056	7.230	.0580	698.1	.4906	555.44	18.851	559.082	1.295	.081	.9477	[illegible]
9	-30.503	2.036	-37.634	7.191	.0573	703.4	.4917	557.77	18.919	559.694	1.297	.081	.9472	[illegible]
10	-31.128	2.824	-38.331	7.203	.0623	708.8	.4909	557.23	18.963	560.320	1.299	.082	.9418	[illegible]
11	-31.719	3.755	-39.394	7.276	.0669	714.2	.4905	557.06	19.009	560.961	1.300	.083	.9364	[illegible]
12	-32.280	4.916	-39.536	7.416	.0699	719.7	.4908	557.78	19.065	561.617	1.301	.084	.9324	[illegible]
13	-32.312	5.233	-40.434	7.622	.0712	725.3	.4920	559.37	19.130	562.289	1.302	.084	.9298	[illegible]
14	-33.313	7.654	-41.204	7.890	.0724	731.0	.4932	561.06	19.197	562.978	1.302	.084	.9273	[illegible]
15	-33.783	9.120	-42.003	8.220	.0854	736.9	.4881	555.84	19.157	563.589	1.302	.086	.9187	[illegible]
16	-34.223	10.548	-42.837	8.614	.1151	743.0	.4777	544.82	19.115	564.433	1.302	.088	.8839	[illegible]
17	-34.531	11.816	-43.705	9.074	.1404	749.3	.4670	533.55	19.050	565.218	1.302	.091	.8589	[illegible]
18	-34.985	12.762	-44.532	9.595	.1523	755.9	.4622	528.65	19.060	566.043	1.304	.093	.8464	[illegible]
19	-35.265	13.235	-45.436	10.171	.1645	762.8	.4558	523.17	19.069	566.905	1.306	.095	.8338	[illegible]
20	-35.465	13.326	-46.237	10.792	.1774	769.9	.4508	515.91	19.075	567.807	1.310	.098	.8289	.8276
21	-35.617	13.234	-47.070	11.453	.1915	777.3	.4436	503.56	19.073	568.753	1.314	.100	.8072	.8145

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.298 ISEN. EFF.= .905 POLY. EFF.= .909 DELTA T ON T = .085

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5493	473.05	498.26	687.05	574.155	535.052	20.614	16.099	.6050	46.49	10.63	-2.464	.0818
2	7.5947	465.24	495.66	679.80	574.194	535.912	20.619	16.159	.5932	46.81	9.69	-3.181	.0813
3	7.6403	459.25	492.95	673.75	574.229	536.626	20.623	16.265	.5924	47.03	9.13	-4.103	.0815
4	7.6931	454.68	490.13	668.60	574.257	537.227	20.627	16.329	.5876	47.15	8.35	-5.280	.0818
5	7.7365	451.23	487.33	664.15	574.279	537.741	20.631	16.385	.5834	47.20	7.56	-6.792	.0820
6	7.7858	448.68	484.41	660.28	574.299	538.185	20.635	16.433	.5798	47.19	6.75	-8.779	.0822
7	7.8330	447.03	481.55	657.06	574.327	538.565	20.642	16.477	.5767	47.13	5.93	-11.514	.0823
8	7.8871	445.97	478.63	654.20	574.350	538.899	20.645	16.516	.5741	47.02	5.10	-15.541	.0825
9	7.9390	444.98	475.76	652.16	574.497	539.267	20.662	16.551	.5721	46.97	4.27	-22.199	.0826
10	7.9919	442.85	478.93	652.29	575.123	539.879	20.694	16.584	.5719	47.24	3.42	-35.934	.0826
11	8.0456	441.11	481.00	652.64	575.748	540.468	20.735	16.614	.5719	47.48	2.55	-84.613	.0827
12	8.1003	439.75	481.19	651.85	576.158	540.962	20.757	16.642	.5709	47.58	1.67	282.725	.0828
13	8.1559	438.75	479.29	649.79	575.325	541.352	20.757	16.667	.5659	47.53	.76	53.659	.0828
14	8.2123	438.10	477.37	647.93	576.490	541.718	20.757	16.690	.5671	47.46	-.16	29.315	.0829
15	8.2701	430.73	482.81	647.03	577.559	542.885	20.762	16.711	.5657	48.26	-1.13	20.871	.0828
16	8.3301	417.47	494.04	646.80	579.364	544.716	20.770	16.732	.5645	49.80	-2.16	15.540	.0826
17	8.3930	403.65	504.98	646.48	581.174	546.563	20.773	16.754	.5633	51.36	-3.26	13.144	.0825
18	8.4536	396.63	509.09	645.34	582.172	547.684	20.783	16.777	.5618	52.08	-4.45	11.766	.0824
19	8.5263	388.37	513.53	644.15	583.239	548.880	20.783	16.801	.5601	52.87	-5.75	11.064	.0823
20	8.5955	379.76	518.59	642.77	584.411	550.201	20.793	16.829	.5582	53.79	-7.21	11.695	.0823
21	8.6639	368.01	524.54	640.76	585.731	551.735	20.794	16.865	.5557	54.95	-8.95	20.749	.0822

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAD	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.047	13.911	-20.142	7.494	.0912	671.8	.4437	503.66	18.428	556.189	1.403	.107	.9481	.9585
2	-13.551	13.616	-21.153	7.060	.0834	675.7	.4390	498.88	18.430	556.535	1.403	.107	.9481	.9585
3	-14.468	13.351	-22.147	7.673	.0846	679.4	.4350	495.61	18.533	556.395	1.403	.107	.9481	.9585
4	-15.75[illegible]	9.234	[illegible]	.733	.0831	684.1	.4344	494.2[illegible]	18.599	557.471	1.404	.107	.9482	.9586
5	-15.270	9.370	[illegible]	[illegible].744	.0805	688.4	.4333	493.96	18.647	557.960	1.404	.107	.9483	.9508
6	-17.1[illegible]3	7.972	[illegible]	[illegible].744	.0779	692.7	.4344	494.65	18.707	558.462	1.404	.107	.9486	.9510
7	-17.[illegible]47	7.605	[illegible]	7.7[illegible]	.0721	697.[illegible]	.4357	495.33	18.771	558.375	1.405	.107	.9491	.9515
8	-18.749	[illegible].507	-26.533	7.324	.0723	701.5	.4376	498.07	18.837	559.303	1.405	.107	.9497	.9520
9	-19.42[illegible]	[illegible]	-27.[illegible]3	7.590	.0715	705.4	.4392	500.[illegible]	18.83[illegible]	560.042	1.406	.108	.9490	.9514
10	-20.014	7.035	[illegible]	7.021	.0777	711.1	.4334	500.01	18.323	550.593	1.405	.109	.9437	.9464
11	-20.554	[illegible].624	[illegible]	7.4[illegible]	.0530	715.4	.4379	499.74	18.332	551.159	1.411	.110	.9385	.9415
12	-21.330	[illegible]	[illegible].778	[illegible]	.0374	720.7	.4356	500.70	18.991	551.738	1.412	.111	.9346	.9377
13	-21.457	9.538	[illegible]	7.849	.0539	725.7	.4408	503.20	19.043	552.330	1.412	.111	.9320	.9352
14	-21.533	10.726	-35.[illegible]	3.194	.0905	730.7	.4429	505.07	19.045	552.336	1.412	.111	.9293	.9327
15	-22.135	11.[illegible]	-3[illegible]	3.[illegible]	.1135	735.8	.4368	493.97	19.[illegible]	553.[illegible]	1.413	.114	.9131	.9172
16	-22.143	[illegible].[illegible]73	-33.[illegible]	3.251	.1439	741.[illegible]	.4234	455.14	18.927	554.213	1.413	.117	.8869	.8923
17	-22.433	13.517	-33.[illegible]	4.[illegible]53	.17[illegible]5	746.8	.4100	470.53	18.303	554.303	1.414	.120	.8622	.8668
18	-22.342	13.[illegible]	-31.[illegible]53	3.1[illegible]5	.1984	752.6	.4051	465.42	18.794	555.327	1.414	.122	.8492	.8564
19	-22.142	13.[illegible]	-32.[illegible]25	10.041	.2055	758.[illegible]	.3937	453.07	18.7[illegible]5	556.352	1.415	.124	.8358	.8436
20	-21.950	13.[illegible]	-32.[illegible]	11.130	.2217	764.9	.3931	452.03	18.726	557.170	1.415	.127	.8215	.8300
21	-21.371	13.1[illegible]	-33.[illegible]	12.403	.2354	771.4	.3543	443.14	18.573	558.000	1.415	.129	.8060	.8153

STATION 4 1ST STATOR PERFORMANCE PRESSURE RATIO = 1.410 ISEN. EFF.= .908 POLY. EFF.= .913 DELTA T ON T = .113

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LIN	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.57[illegible]	446.90	[illegible]	[illegible]7.34	574.155	537.209	20.614	16.327	[illegible]	48.04	7.82	9.349	.0818
2	7.5232	443.19	433.81	630.38	574.194	537.355	20.613	16.343	.5850	47.77	7.81	10.329	.0818
3	7.5722	451.41	439.[illegible]	[illegible]	574.229	537.331	20.523	16.345	.5851	47.40	7.54	12.660	.0818
4	7.7213	45[illegible].39	435.[illegible]	657.[illegible]	574.2[illegible]7	537.344	20.62[illegible]	16.342	[illegible]	46.93	7.13	13.619	.0818
5	7.7703	[illegible]	435.21	659.51	574.279	537.260	20.631	16.336	.5873	45.55	6.64	15.756	.0818
6	7.8130	463.6[illegible]	432.3[illegible]	[illegible]	574.299	537.218	20.635	16.330	[illegible]	46.13	6.09	21.726	.0818
7	7.85[illegible]	467.57	429.[illegible]	[illegible]4.32	574.327	537.162	20.64[illegible]	16.327	.5887	45.73	5.[illegible]1	24.030	.0818
8	7.91[illegible]	471.17	[illegible]	670.[illegible]	574.350	537.125	20.64[illegible]	16.326	[illegible]	45.35	4.91	25.116	.0818
9	7.96[illegible]	473.[illegible]	425.23	671.[illegible]	574.437	537.179	20.65[illegible]	16.328	[illegible]	45.00	4.29	24.846	.0818
10	8.013	475.15	427.04	673.7[illegible]	575.123	537.[illegible]21	[illegible]	16.331	.5973	45.15	3.68	23.503	.0817
11	8.05[illegible]	475.19	[illegible]	675.12	575.745	537.891	20.73[illegible]	16.337	.5933	45.23	3.05	21.598	.0817
12	8.112[illegible]	475.[illegible]	433.4[illegible]	677.[illegible]	575.1[illegible]6	538.133	20.72[illegible]	16.34[illegible]	.5944	45.21	2.41	13.527	.0817
13	8.15[illegible]	477.35	[illegible]	675.17	575.325	538.454	20.737	16.357	[illegible]	45.09	1.75	17.563	.0817
14	8.21[illegible]	477.32	477.[illegible]	675.[illegible]	575.490	538.750	20.757	16.372	[illegible]	45.00	1.07	15.810	.0818
15	[illegible]	470.35	[illegible]	674.1[illegible]	577.5[illegible]9	539.911	20.75[illegible]	16.393	.5914	45.70	.35	14.219	.0817
16	8.3[illegible]	457.[illegible]	[illegible]	673.4[illegible]	573.304	541.801	20.770	16.420	.5994	47.26	-.45	12.696	.0815
17	8.3777	442.3[illegible]	505.93	[illegible]	581.174	543.773	20.773	16.455	.5871	48.63	-1.36	11.146	.0814
18	8.43[illegible]	433.02	510.32	[illegible]9.27	582.172	545.077	20.733	16.493	.5940	49.68	-2.38	9.478	.0814
19	8.5014	422.[illegible]7	51[illegible].[illegible]3	[illegible].27	583.239	546.479	20.73[illegible]	16.54[illegible]	.58[illegible]	[illegible].63	-3.[illegible]1	7.573	.0815
20	[illegible]	411.53	[illegible].23	[illegible]	[illegible].411	547.9[illegible]1	20.743	16.5[illegible]	.5773	51.64	-4.76	5.354	.0815
21	8.5[illegible]	402.14	525.3[illegible]	652.4[illegible]	585.731	549.399	20.744	16.516	.5757	52.52	-5.16	3.053	.0814

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6199	463.02	493.68	676.83	574.155	536.207	20.614	16.221	.5954	46.84	9.06	26.367	.0814
2	7.6735	487.82	490.25	691.61	574.194	534.570	20.619	16.048	.6093	45.14	8.52	-103.993	.0808
3	7.7330	509.44	487.10	704.84	574.229	533.073	20.623	15.891	.6218	43.72	7.81	-25.242	.0802
4	7.7836	526.30	484.13	715.14	574.257	531.889	20.627	15.768	.6316	42.61	7.05	-17.033	.0798
5	7.8314	538.45	481.42	722.58	574.279	531.024	20.631	15.679	.6387	41.78	6.32	-14.283	.0794
6	7.8774	548.14	478.78	727.80	574.299	530.417	20.635	15.617	.6437	41.14	5.63	-13.349	.0792
7	7.9223	555.09	476.31	731.43	574.327	530.006	20.642	15.578	.6472	40.63	5.01	-13.433	.0791
8	7.9654	560.05	473.87	733.63	574.350	529.761	20.648	15.555	.6492	40.23	4.45	-14.313	.0790
9	8.0102	563.14	472.52	735.12	574.497	529.727	20.662	15.548	.6506	40.00	3.95	-16.888	.0790
10	8.[illegible]39	563.79	475.24	737.37	575.123	530.080	20.699	15.553	.6524	40.13	3.49	-18.684	.0789
11	8.[illegible]7	563.31	477.90	738.72	575.748	530.540	20.735	15.569	.6533	40.31	3.06	-22.884	.0790
12	8.[illegible]	561.74	473.74	738.07	576.158	531.031	20.757	15.596	.6524	40.44	2.64	-30.325	.0790
13	8.1[illegible]3	559.13	477.51	735.28	576.325	531.537	20.757	15.632	.6496	40.50	2.22	-47.253	.0791
14	8.23[illegible]3	555.53	475.27	731.74	576.490	532.134	20.757	15.678	.6461	40.61	1.80	-120.826	.0791
15	8.2773	545.44	482.38	728.15	577.559	533.639	20.752	15.735	.6421	41.49	1.33	215.280	.0793
16	8.3251	528.94	494.33	723.97	579.364	535.949	20.770	15.807	.6370	43.06	.75	63.484	.0794
17	8.3753	509.31	505.04	717.96	581.174	538.480	20.778	15.902	.6302	44.82	.03	42.678	.0795
18	8.4256	491.33	510.89	708.81	582.172	540.562	20.783	16.025	.6210	46.12	-.85	37.684	.0798
19	8.4557	468.06	515.93	696.65	583.239	543.047	20.788	16.184	.6090	47.79	-1.88	44.234	.0802
20	8.5488	438.13	521.49	681.11	584.411	545.994	20.793	16.382	.5938	49.96	-3.05	196.047	.0807
21	8.6199	401.58	527.59	663.03	585.731	549.329	20.799	16.509	.5763	52.72	-4.27	-27.461	.0813

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.917	-39.941	46.836	-1.982	0.0000	0.0	.5954	676.83	20.614	574.155	1.403	.107	.9461	.9505
2	47.988	-35.603	45.142	-2.846	0.0000	0.0	.6093	691.61	20.619	574.194	1.403	.107	.9461	.9505
3	47.261	-33.220	43.716	-3.545	0.0000	0.0	.6218	704.84	20.623	574.229	1.403	.107	.9461	.9505
4	46.746	-29.735	42.613	-4.133	0.0000	0.0	.6316	715.14	20.627	574.257	1.404	.107	.9462	.9506
5	46.339	-25.255	41.776	-4.561	0.0000	0.0	.6387	722.58	20.631	574.279	1.404	.107	.9463	.9506
6	45.992	-22.833	41.136	-4.856	0.0000	0.0	.6437	727.80	20.635	574.299	1.404	.107	.9466	.9511
7	45.668	-19.519	40.632	-5.035	0.0000	0.0	.6472	731.43	20.642	574.327	1.405	.107	.9493	.9515
8	45.360	-16.226	40.235	-5.125	0.0000	0.0	.6492	733.63	20.648	574.350	1.405	.107	.9497	.9520
9	45.080	-12.750	40.000	-5.080	0.0000	0.0	.6506	735.12	20.662	574.497	1.406	.108	.9498	.9514
10	44.844	-3.927	40.129	-4.715	0.0000	0.0	.6524	737.37	20.699	575.123	1.408	.109	.9437	.9464
11	44.679	-4.929	40.311	-4.369	0.0000	0.0	.6533	738.72	20.736	575.748	1.411	.110	.9385	.9419
12	44.613	-1.113	40.439	-4.175	0.0000	0.0	.6524	738.07	20.757	576.158	1.412	.111	.9346	.9377
13	44.656	2.230	40.498	-4.158	0.0000	0.0	.6496	735.28	20.757	576.325	1.412	.111	.9320	.9352
14	44.769	5.801	40.507	-4.162	0.0000	0.0	.6461	731.74	20.757	576.490	1.412	.111	.9293	.9327
15	44.905	10.253	41.489	-3.415	0.0000	0.0	.6421	728.15	20.762	577.559	1.413	.114	.9131	.9175
16	45.071	15.232	43.063	-2.007	0.0000	0.0	.6370	723.97	20.770	579.364	1.413	.117	.8869	.8923
17	45.429	23.309	44.816	-.613	0.0000	0.0	.6302	717.96	20.778	581.174	1.414	.120	.8622	.8688
18	46.180	30.602	46.118	-.062	0.0000	0.0	.6210	708.81	20.783	582.172	1.414	.122	.8492	.8564
19	47.357	37.235	47.739	.431	0.0000	0.0	.6090	696.65	20.788	583.239	1.415	.124	.8350	.8430
20	48.392	42.723	49.964	1.072	0.0000	0.0	.5938	681.11	20.793	584.411	1.415	.127	.8215	.8300
21	50.814	46.652	52.723	1.909	0.0000	0.0	.5763	663.03	20.799	585.731	1.415	.129	.8060	.8153

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.410 ISEN. EFF.= .908 POLY. EFF.= .913 DELTA T ON T = .113

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14.295	[illegible]	32.81	5.21	-3.088	.0743
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	513.038	20.524	14.407	[illegible]	32.60	4.37	-3.720	.0747
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	520.222	[illegible]	14.521	.7210	32.34	3.59	-3.826	.0751
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	521.391	[illegible]	[illegible]	[illegible]	32.05	2.89	-4.025	.0755
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	522.509	[illegible]	14.741	.7044	31.76	2.30	-4.311	.0759
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.521	[illegible]	[illegible]	31.59	1.83	-4.683	.0763
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	524.521	[illegible]	14.930	[illegible]	31.44	1.48	-5.142	.0766
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	525.350	20.514	15.011	[illegible]	31.30	1.24	-5.698	.0769
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.084	[illegible]	31.16	1.09	-6.380	.0771
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	527.154	[illegible]	15.140	[illegible]	31.03	1.00	-7.264	.0773
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.204	[illegible]	30.94	.95	-8.474	.0775
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	523.751	[illegible]	15.254	[illegible]	30.90	.92	-10.193	.0776
13	[illegible]	[illegible]	[illegible]	753.13	[illegible]	[illegible]	[illegible]	15.297	[illegible]	30.91	.92	-12.603	.0777
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.333	[illegible]	30.96	.93	-17.182	.0779
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.361	[illegible]	31.05	.91	-27.119	.0778
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	532.557	20.622	15.380	.6612	31.22	[illegible]	-56.925	.0777
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	534.578	[illegible]	15.386	[illegible]	31.54	.61	51.054	.0774
18	[illegible]	[illegible]	539.07	[illegible]	[illegible]	535.376	[illegible]	15.373	[illegible]	32.07	.26	14.383	.0773
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	535.934	[illegible]	15.330	[illegible]	32.76	-.26	10.904	.0770
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	536.257	20.621	15.254	[illegible]	33.59	-1.02	7.672	.0765
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.149	[illegible]	34.56	-2.03	5.947	.0760

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES [illegible]	REL FLOW ANGLE	DEVIATION [illegible]	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	.0215	[illegible]	.7376	824.13	[illegible]	574.155	1.396	.107	.9346	.9376
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.524	574.194	1.397	.107	.9345	.9376
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7216	807.34	20.527	574.229	1.397	.107	.9344	.9374
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	574.257	1.397	.107	.9341	.9371
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	574.279	1.397	.107	.9335	.9366
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	782.51	20.521	574.299	1.396	.107	.9325	.9356
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	574.327	1.396	.107	.9315	.9346
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	763.81	20.514	574.350	1.396	.107	.9306	.9338
9	[illegible]	[illegible]	[illegible]	[illegible]	.0271	0.0	.6782	763.72	20.523	574.497	1.396	.108	.9293	.9326
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	575.123	1.399	.109	.9235	.9270
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	20.537	575.740	1.401	.110	.9178	.9216
12	[illegible]	-1.431	[illegible]	1.034	.0233	[illegible]	[illegible]	[illegible]	[illegible]	576.158	1.402	.111	.9139	.9179
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.402	.111	.9118	.9159
14	[illegible]	[illegible]	[illegible]	[illegible]	.0233	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.403	.111	.9097	.9140
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6520	[illegible]	[illegible]	577.559	1.403	.114	.8942	.8992
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6512	[illegible]	20.527	[illegible]	1.403	.117	.8677	.8739
17	[illegible]	[illegible]	[illegible]	[illegible]	.0317	[illegible]	[illegible]	[illegible]	20.524	531.174	1.403	.120	.8427	.8501
18	[illegible]	[illegible]	[illegible]	[illegible]	.0334	0.0	.6517	[illegible]	20.522	532.172	1.403	.122	.8292	.8372
19	[illegible]	[illegible]	32.754	[illegible]	[illegible]	0.0	[illegible]	755.74	20.522	533.239	1.403	.124	.8156	.8242
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.6707	[illegible]	20.621	534.411	1.403	.127	.8009	.8182
21	[illegible]	[illegible]	[illegible]	[illegible]	.0431	0.0	[illegible]	[illegible]	20.513	535.731	1.403	.129	.7846	.7948

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.400 ISEN. EFF.= .890 POLY. EFF.= .895 DELTA T ON T = .113

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	665.25	213.35	697.33	574.155	533.807	20.425	15.824	.6133	17.58	-2.23	-5.196	.0798
2	7.7577	655.65	207.15	687.30	574.194	535.028	20.427	15.347	.6055	17.53	-2.33	-5.844	.0802
3	7.7933	645.33	203.97	677.75	574.229	536.178	20.425	16.062	.5962	17.51	-2.39	-6.644	.0806
4	7.8297	637.40	201.15	668.33	574.257	537.250	20.422	16.170	.5874	17.52	-2.41	-7.623	.0810
5	7.8671	628.94	193.45	659.51	574.279	538.250	20.415	16.258	.5791	17.51	-2.37	-8.807	.0813
6	7.9054	620.59	195.51	650.95	574.299	539.199	20.403	16.356	.5710	17.48	-2.29	-10.218	.0816
7	7.9445	613.90	192.53	643.39	574.327	540.038	20.391	16.433	.5640	17.42	-2.15	-11.861	.0819
8	7.9553	607.35	190.03	636.90	574.350	540.754	20.377	16.496	.5579	17.36	-1.95	-13.730	.0821
9	8.0255	604.00	188.72	632.80	574.497	541.329	20.382	16.547	.5540	17.35	-1.72	-15.767	.0822
10	8.0591	602.65	188.70	631.51	575.123	542.091	20.409	16.587	.5525	17.39	-1.46	-17.848	.0823
11	8.1123	602.07	189.07	631.05	575.748	542.764	20.435	16.618	.5518	17.43	-1.19	-19.837	.0824
12	8.1561	601.47	189.29	630.54	576.158	543.228	20.455	16.642	.5511	17.47	-.91	-21.626	.0824
13	8.2007	600.64	189.28	629.76	576.325	543.477	20.462	16.658	.5503	17.49	-.63	-23.172	.0825
14	8.2459	600.41	189.52	629.61	576.490	543.658	20.471	16.667	.5501	17.52	-.35	-24.511	.0825
15	8.2918	601.27	190.34	630.63	577.559	544.616	20.481	16.670	.5505	17.57	-.08	-25.843	.0824
16	8.3393	601.31	191.54	631.55	579.364	546.331	20.473	16.665	.5504	17.66	.18	-27.655	.0821
17	8.3954	602.34	193.73	633.21	581.174	547.970	20.465	16.652	.5510	17.82	.43	-30.908	.0818
18	8.4331	603.33	197.03	635.26	582.172	548.754	20.451	16.628	.5524	18.07	.65	-38.116	.0815
19	8.4813	605.29	201.73	638.97	583.239	549.431	20.454	16.590	.5553	18.40	.82	-59.578	.0812
20	8.5301	609.72	207.54	644.07	584.411	550.061	20.450	16.536	.5594	18.80	.90	-275.034	.0809
21	8.5795	614.25	214.25	650.55	585.731	550.688	20.443	16.457	.5647	19.23	.68	76.314	.0805

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.2[illegible]	-3.414	17.585	1.351	.0424	0.0	.6153	697.69	20.428	574.155	1.390	.107	.9215	.9258
2	15.1[illegible]	-3.939	17.534	1.354	.0419	0.0	.6055	687.60	20.427	574.194	1.390	.107	.9207	.9243
3	16.151	-3.335	17.515	1.364	.0417	0.0	.5962	677.75	20.425	574.229	1.390	.107	.9199	.9235
4	16.131	-7.001	17.515	1.384	.0421	0.0	.5874	668.39	20.422	574.257	1.390	.107	.9190	.9226
5	16.095	-5.331	17.51[illegible]	1.414	.0433	0.0	.5791	659.51	20.416	574.279	1.389	.107	.9177	.9215
6	16.028	-6.073	17.475	1.450	.0462	0.0	.5710	650.95	20.403	574.299	1.388	.107	.9155	.9193
7	15.927	-5.125	17.417	1.490	.0497	0.0	.5640	643.39	20.390	574.327	1.387	.107	.9132	.9171
8	15.932	-4.132	17.351	1.529	.0534	0.0	.5579	636.86	20.377	574.350	1.387	.107	.9109	.9149
9	15.786	-3.145	17.351	1.566	.054[illegible]	0.0	.5540	632.80	20.382	574.497	1.387	.108	.9093	.9134
10	15.766	-2.215	17.386	1.599	.0563	0.0	.5525	631.51	20.409	575.123	1.389	.109	.9030	.9074
11	15.835	-1.331	17.434	1.629	.05[illegible]1	0.0	.5518	631.06	20.435	575.748	1.391	.110	.8969	.9016
12	15.815	-.716	17.463	1.654	.0595	0.0	.5511	630.54	20.455	576.158	1.392	.111	.8931	.8980
13	15.819	-.131	17.431	1.672	.0575	0.0	.5503	629.76	20.462	576.325	1.392	.111	.8915	.8965
14	15.835	.437	17.518	1.683	.0555	0.0	.5501	629.61	20.471	576.490	1.393	.111	.8901	.8951
15	15.880	1.250	17.596	1.686	.0563	0.0	.5505	630.68	20.481	577.559	1.394	.114	.8753	.8810
16	15.973	2.161	17.655	1.682	.0598	0.0	.5504	631.55	20.473	579.364	1.393	.117	.8483	.8552
17	16.137	3.136	17.916	1.679	.0640	0.0	.5510	633.21	20.465	581.174	1.393	.120	.8228	.8309
18	16.389	4.337	18.059	1.679	.0694	0.0	.5524	635.25	20.458	582.172	1.392	.122	.8067	.8174
19	16.720	5.556	18.434	1.634	.0725	0.0	.5553	638.97	20.454	583.239	1.392	.124	.7949	.8042
20	17.101	5.973	18.798	1.697	.0778	0.0	.5594	644.07	20.450	584.411	1.392	.127	.7802	.7902
21	17.510	9.542	19.229	1.719	.0849	0.0	.5647	650.55	20.443	585.731	1.391	.129	.7641	.7748

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.391 ISEN. EFF.= .871 POLY. EFF.= .877 DELTA T ON T = .113

STATION 14 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6723	548.04	59.37	551.25	574.155	548.988	20.336	17.379	.4793	6.18	-4.29	16.241	.0852
2	7.7110	547.27	58.03	550.33	574.194	549.110	20.329	17.382	.4784	6.05	-4.05	17.306	.0852
3	7.7503	546.41	56.81	549.35	574.229	549.234	20.321	17.385	.4775	5.94	-3.81	18.531	.0852
4	7.7913	545.45	55.83	548.30	574.257	549.358	20.312	17.389	.4765	5.84	-3.56	19.960	.0852
5	7.8325	544.29	54.93	547.05	574.279	549.494	20.301	17.392	.4754	5.76	-3.30	21.648	.0852
6	7.8745	542.31	54.10	545.00	574.299	549.700	20.274	17.394	.4735	5.70	-3.03	23.694	.0851
7	7.9174	540.36	53.37	542.96	574.327	549.910	20.259	17.396	.4717	5.64	-2.75	26.257	.0851
8	7.9615	538.38	52.59	540.95	574.350	550.115	20.236	17.397	.4693	5.59	-2.46	29.571	.0851
9	8.0055	538.68	52.35	541.22	574.497	550.238	20.238	17.397	.4700	5.55	-2.15	33.932	.0851
10	8.0520	541.37	52.31	543.59	575.123	550.652	20.261	17.397	.4719	5.52	-1.96	39.706	.0850
11	8.0930	543.39	52.35	546.11	575.748	551.050	20.285	17.395	.4739	5.50	-1.56	47.319	.0849
12	8.1442	545.73	52.57	548.25	576.158	551.266	20.304	17.391	.4757	5.49	-1.28	57.708	.0849
13	8.1915	547.37	52.64	549.89	576.325	551.283	20.315	17.386	.4771	5.49	-1.01	72.939	.0849
14	8.2311	549.22	52.87	551.76	576.490	551.278	20.329	17.379	.4787	5.50	-.74	97.332	.0848
15	8.2872	551.66	53.24	554.22	577.559	552.123	20.342	17.371	.4805	5.51	-.49	140.122	.0846
16	8.3350	552.27	53.54	554.82	579.364	553.874	20.328	17.361	.4803	5.54	-.23	227.044	.0843
17	8.3854	552.82	54.19	555.47	581.174	555.626	20.313	17.351	.4801	5.60	.03	457.582	.0840
18	8.4355	552.90	55.10	555.64	582.172	556.009	20.297	17.340	.4798	5.69	.30	2292.730	.0838
19	8.4853	553.61	56.61	556.50	583.239	557.598	20.289	17.329	.4801	5.84	.56	-1193.322	.0836
20	8.5375	554.25	58.77	557.36	584.411	558.692	20.279	17.318	.4804	6.05	.82	-656.754	.0834
21	8.5913	555.81	61.51	559.20	585.731	559.936	20.263	17.307	.4806	6.33	1.06	-510.607	.0832

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES L A	REL FLOW ANGLE	DEVIATION INCID NCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	6.183	2.218	.0633	0.0	.4793	551.25	20.336	574.155	1.384	.107	.9083	.9124
2	3.829	-.933	6.053	2.223	.0634	0.0	.4784	550.33	20.329	574.194	1.383	.107	.9066	.9108
3	3.694	-.917	5.935	2.242	.0638	0.0	.4775	549.35	20.321	574.229	1.383	.107	.9049	.9092
4	3.564	-.831	5.841	2.277	.0647	0.0	.4765	548.30	20.312	574.257	1.382	.107	.9032	.9075
5	3.439	-.741	5.763	2.324	.0666	0.0	.4754	547.05	20.301	574.279	1.381	.107	.9012	.9056
6	3.319	-.653	5.697	2.379	.0719	0.0	.4735	545.00	20.274	574.299	1.380	.107	.8978	.9023
7	3.189	-.575	5.633	2.449	.0759	0.0	.4717	542.96	20.259	574.327	1.378	.107	.8942	.8989
8	3.085	-.508	5.589	2.503	.0811	0.0	.4698	540.95	20.236	574.350	1.377	.107	.8907	.8955
9	2.983	-.451	5.550	2.567	.0828	0.0	.4700	541.22	20.238	574.497	1.377	.108	.8887	.8936
10	2.896	-.380	5.522	2.625	.0839	0.0	.4719	543.59	20.261	575.123	1.379	.109	.8821	.8873
11	2.827	-.346	5.504	2.677	.0874	0.0	.4739	546.11	20.285	575.748	1.380	.110	.8757	.8813
12	2.777	-.270	5.494	2.717	.0878	0.0	.4757	548.25	20.304	576.158	1.382	.111	.8721	.8778
13	2.750	-.155	5.493	2.743	.0850	0.0	.4771	549.89	20.316	576.325	1.382	.111	.8713	.8770
14	2.745	-.139	5.496	2.751	.0843	0.0	.4787	551.76	20.329	576.490	1.383	.111	.8706	.8764
15	2.771	-.154	5.512	2.741	.0835	0.0	.4805	554.22	20.342	577.559	1.384	.114	.8566	.8630
16	2.821	-.239	5.543	2.722	.0891	0.0	.4803	554.82	20.328	579.364	1.383	.117	.8292	.8368
17	2.893	-.437	5.599	2.706	.0953	0.0	.4801	555.47	20.313	581.174	1.382	.120	.8033	.8121
18	2.987	-.644	5.691	2.704	.1020	0.0	.4798	555.64	20.297	582.172	1.381	.122	.7886	.7980
19	3.116	-.841	5.838	2.722	.1084	0.0	.4801	556.50	20.289	583.239	1.381	.124	.7745	.7845
20	3.293	-.977	6.053	2.760	.1155	0.0	.4804	557.36	20.279	584.411	1.380	.127	.7595	.7702
21	3.508	-1.055	6.326	2.818	.1265	0.0	.4806	559.20	20.263	585.731	1.379	.129	.7432	.7546

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.381 ISEN. EFF.= .852 POLY. EFF.= .858 DELTA T ON T = .113

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6410	493.59	0.00	493.59	574.155	553.979	20.244	17.858	.4272	0.00	-1.66	10.624	.0867
2	7.6812	494.21	0.00	494.21	574.194	553.967	20.231	17.840	.4278	0.00	-1.61	11.250	.0866
3	7.7233	494.72	0.00	494.72	574.223	553.960	20.217	17.823	.4282	0.00	-1.56	11.871	.0866
4	7.7500	495.13	0.00	495.13	574.257	553.955	20.202	17.807	.4285	0.00	-1.49	12.611	.0865
5	7.8033	495.18	0.00	495.18	574.279	553.972	20.185	17.792	.4286	0.00	-1.42	13.804	.0864
6	7.8540	493.91	0.00	493.91	574.299	554.046	20.155	17.777	.4275	0.00	-1.34	15.023	.0863
7	7.8993	492.46	0.00	492.46	574.327	554.244	20.125	17.764	.4261	0.00	-1.24	16.584	.0862
8	7.9455	490.79	0.00	490.79	574.350	554.402	20.094	17.752	.4245	0.00	-1.13	18.662	.0861
9	7.9925	492.10	0.00	492.10	574.497	554.443	20.094	17.741	.4256	0.00	-1.01	21.453	.0861
10	8.0400	495.33	0.00	495.33	575.123	554.805	20.114	17.731	.4284	0.00	-.89	25.218	.0860
11	8.0879	498.42	0.00	498.42	575.748	555.177	20.134	17.723	.4309	0.00	-.77	30.517	.0859
12	8.1353	501.15	0.00	501.15	576.159	555.300	20.153	17.716	.4332	0.00	-.64	38.429	.0858
13	8.1831	503.37	0.00	503.37	576.325	555.342	20.173	17.710	.4352	0.00	-.52	51.174	.0858
14	8.2344	505.44	0.00	505.44	576.490	555.335	20.187	17.706	.4370	0.00	-.40	74.839	.0858
15	8.2841	507.60	0.00	507.60	577.559	556.224	20.202	17.704	.4385	0.00	-.27	134.137	.0856
16	8.3345	506.34	0.00	506.34	579.364	558.135	20.178	17.703	.4366	0.00	-.15	654.745	.0853
17	8.3859	504.67	0.00	504.67	581.174	560.070	20.155	17.703	.4345	0.00	-.02	-214.434	.0850
18	8.4331	502.51	0.00	502.51	582.172	561.240	20.131	17.705	.4324	0.00	.12	-90.602	.0849
19	8.4813	501.65	0.00	501.65	583.239	562.404	20.115	17.708	.4310	0.00	.25	-57.442	.0847
20	8.5432	500.41	0.00	500.41	584.411	563.681	20.130	17.714	.4294	0.00	.39	-42.393	.0845
21	8.6000	499.01	0.00	499.01	585.731	565.115	20.133	17.721	.4277	0.00	.52	-33.985	.0844

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.0842	0.0	.4272	493.59	20.244	574.155	1.378	.107	.8951	.8997
2	-7.402	.020	0.000	7.402	.0849	0.0	.4278	494.21	20.231	574.194	1.377	.107	.8925	.8972
3	-7.574	.019	0.000	7.574	.0858	0.0	.4282	494.72	20.217	574.223	1.376	.107	.8899	.8947
4	-7.749	.017	0.000	7.749	.0874	0.0	.4285	495.13	20.202	574.257	1.375	.107	.8874	.8923
5	-7.923	.015	0.000	7.923	.0899	0.0	.4286	495.18	20.185	574.279	1.374	.107	.8845	.8896
6	-8.094	.013	0.000	8.094	.0955	0.0	.4275	493.91	20.155	574.299	1.371	.107	.8799	.8852
7	-8.263	.011	0.000	8.263	.1020	0.0	.4261	492.46	20.125	574.327	1.369	.107	.8751	.8805
8	-8.425	.009	0.000	8.425	.1099	0.0	.4245	490.75	20.094	574.350	1.367	.107	.8702	.8758
9	-8.576	.008	0.000	8.576	.1110	0.0	.4256	492.10	20.094	574.497	1.367	.108	.8680	.8737
10	-8.712	.006	0.000	8.712	.1137	0.0	.4284	495.33	20.114	575.123	1.369	.109	.8611	.8672
11	-8.829	.004	0.000	8.829	.1165	0.0	.4309	498.42	20.134	575.748	1.370	.110	.8545	.8609
12	-8.926	.003	0.000	8.926	.1139	0.0	.4332	501.16	20.153	576.159	1.371	.111	.8511	.8576
13	-9.001	.001	0.000	9.001	.1145	0.0	.4352	503.37	20.173	576.325	1.372	.111	.8510	.8575
14	-9.045	-.002	0.000	9.045	.1124	0.0	.4370	505.44	20.187	576.490	1.374	.111	.8508	.8574
15	-9.063	-.005	0.000	9.063	.1115	0.0	.4385	507.60	20.202	577.559	1.375	.114	.8374	.8446
16	-9.058	-.008	0.000	9.058	.1192	0.0	.4366	506.34	20.178	579.364	1.373	.117	.8094	.8178
17	-9.061	-.012	0.000	9.061	.1275	0.0	.4346	504.67	20.155	581.174	1.371	.120	.7829	.7924
18	-9.086	-.018	0.000	9.086	.1370	0.0	.4324	502.51	20.131	582.172	1.370	.122	.7676	.7777
19	-9.127	-.024	0.000	9.127	.1454	0.0	.4310	501.65	20.115	583.239	1.369	.124	.7533	.7640
20	-9.170	-.031	0.000	9.170	.1558	0.0	.4294	500.41	20.130	584.411	1.365	.127	.7383	.7496
21	-9.213	-.038	0.000	9.213	.1654	0.0	.4277	499.01	20.133	585.731	1.367	.129	.7223	.7342

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.371 ISEN. EFF.= .832 POLY. EFF.= .839 DELTA T ON T = .113

STATION 16 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	507.22	0.00	507.22	574.155	552.649	20.244	17.731	.4343	0.00	0.00	0.000	.0063
2	7.6835	505.93	0.00	505.93	574.194	552.992	20.231	17.731	.4353	0.00	-.03	1030.558	.0063
3	7.7218	504.72	0.00	504.72	574.223	553.132	20.217	17.730	.4372	0.00	-.06	558.003	.0062
4	7.7541	503.44	0.00	503.44	574.257	553.257	20.202	17.730	.4360	0.00	-.08	405.259	.0062
5	7.8072	501.93	0.00	501.93	574.279	553.417	20.185	17.729	.4345	0.00	-.10	333.277	.0062
6	7.8513	499.17	0.00	499.17	574.299	553.664	20.155	17.729	.4322	0.00	-.12	294.320	.0062
7	7.8954	496.35	0.00	496.35	574.327	553.925	20.125	17.728	.4296	0.00	-.13	272.034	.0061
8	7.9423	493.45	0.00	493.45	574.350	554.185	20.094	17.727	.4270	0.00	-.13	262.569	.0061
9	7.9934	493.55	0.00	493.55	574.497	554.316	20.094	17.726	.4271	0.00	-.13	260.002	.0060
10	8.0370	495.32	0.00	495.92	575.123	554.757	20.114	17.726	.4259	0.00	-.13	266.732	.0060
11	8.0551	498.19	0.00	498.19	575.749	555.195	20.134	17.725	.4307	0.00	-.13	279.990	.0059
12	8.1335	500.28	0.00	500.28	576.158	555.433	20.153	17.724	.4324	0.00	-.12	301.524	.0059
13	8.1927	501.99	0.00	501.99	576.325	555.457	20.173	17.723	.4333	0.00	-.11	333.328	.0058
14	8.2322	503.71	0.00	503.71	576.490	555.480	20.187	17.723	.4354	0.00	-.09	379.182	.0058
15	8.2823	505.65	0.00	505.65	577.559	556.387	20.202	17.722	.4367	0.00	-.08	445.586	.0057
16	8.3330	504.31	0.00	504.31	579.304	558.305	20.175	17.722	.4349	0.00	-.07	546.443	.0054
17	8.3947	502.91	0.00	502.91	581.174	560.234	20.155	17.721	.4323	0.00	-.05	710.985	.0051
18	8.4373	501.08	0.00	501.08	582.172	561.384	20.131	17.721	.4303	0.00	-.04	1009.263	.0049
19	8.4995	500.33	0.00	500.33	583.239	562.514	20.113	17.721	.4293	0.00	-.02	1657.530	.0048
20	8.5450	499.65	0.00	499.65	584.411	563.743	20.105	17.721	.4287	0.00	-.01	3762.699	.0046
21	8.6000	499.01	0.00	499.01	585.731	565.118	20.093	17.721	.4277	0.00	0.00	0.000	.0044

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	509.30	0.00	509.30	574.155	552.750	20.244	17.720	.4404	0.00	0.00	0.000	.0063
2	7.6834	507.05	0.00	507.05	574.194	552.902	20.231	17.720	.4343	0.00	-.00	0.000	.0062
3	7.7219	505.75	0.00	505.75	574.223	553.045	20.217	17.720	.4351	0.00	-.00	0.000	.0062
4	7.7540	504.44	0.00	504.44	574.257	553.164	20.202	17.720	.4350	0.00	-.00	0.000	.0062
5	7.8071	502.55	0.00	502.55	574.279	553.359	20.185	17.720	.4355	0.00	-.01	0.000	.0062
6	7.8511	500.05	0.00	500.05	574.293	553.591	20.155	17.720	.4330	0.00	-.01	0.000	.0061
7	7.8952	497.15	0.00	497.15	574.327	553.858	20.125	17.720	.4304	0.00	-.01	0.000	.0061
8	7.9423	494.19	0.00	494.19	574.350	554.125	20.094	17.721	.4277	0.00	-.01	0.000	.0060
9	7.9932	494.29	0.00	494.29	574.497	554.264	20.094	17.721	.4277	0.00	-.01	0.000	.0060
10	8.0357	496.45	0.00	496.46	575.123	554.712	20.114	17.721	.4294	0.00	-.01	0.000	.0059
11	8.0845	498.05	0.00	498.05	575.749	555.157	20.134	17.721	.4311	0.00	-.01	0.000	.0059
12	8.1334	500.65	0.00	500.65	576.158	555.402	20.153	17.721	.4378	0.00	-.01	0.000	.0058
13	8.1925	502.29	0.00	502.29	576.325	555.433	20.170	17.721	.4342	0.00	-.01	0.000	.0058
14	8.2320	503.33	0.00	503.33	576.490	555.461	20.187	17.721	.4355	0.00	-.01	0.000	.0058
15	8.2821	505.41	0.00	505.31	577.559	556.374	20.202	17.720	.4369	0.00	-.01	0.000	.0057
16	8.3329	504.42	0.00	504.42	579.304	558.296	20.175	17.720	.4349	0.00	-.01	0.000	.0054
17	8.3945	502.39	0.00	502.48	581.174	560.228	20.155	17.721	.4324	0.00	-.01	0.000	.0051
18	8.4372	501.12	0.00	501.12	582.172	561.381	20.131	17.721	.4309	0.00	-.00	0.000	.0049
19	8.4997	500.35	0.00	500.35	583.239	562.513	20.115	17.720	.4298	0.00	-.00	0.000	.0048
20	8.5450	499.66	0.00	499.66	584.411	563.743	20.105	17.721	.4287	0.00	-.00	0.000	.0046
21	8.6000	499.01	0.00	499.01	585.731	565.118	20.093	17.721	.4277	0.00	0.00	0.000	.0044

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7530	7.5439	.5753	8.742	7.434	.0912	.3708	.3411	.5029	.7867	.7417	-60.937	-12.647	6.878	10.991
2	6.8621	7.5947	.5844	8.530	7.600	.0934	.3916	.4105	.5124	.7655	.7335	-61.310	-13.561	6.236	[illegible]
3	6.9791	7.6439	.5937	8.258	7.673	.0858	.4087	.4165	.5173	.7500	.7251	-61.670	-14.469	6.373	[illegible]
4	7.0922	7.6931	.6029	8.034	7.730	.0831	.4227	.4293	.5187	.7362	.7156	-62.004	-15.362	[illegible]	[illegible]
5	7.2042	7.7365	.6121	7.842	7.744	.0805	.4342	.4404	.5178	.7245	.7080	-62.304	-16.270	[illegible]	[illegible]
6	7.3154	7.7858	.6212	7.671	7.744	.0780	.4438	.4492	.5152	.7153	.6993	-62.582	-17.163	[illegible]	[illegible]
7	7.4257	7.8350	.6301	7.513	7.758	.0751	.4515	.4561	.5112	.7075	.6907	-62.856	-17.997	[illegible]	[illegible]
8	7.5353	7.8871	.6390	7.304	7.834	.0723	.4577	.4616	.5062	.7011	.6820	-63.132	-18.746	[illegible]	[illegible]
9	7.6446	7.9393	.6477	7.224	7.990	.0715	.4643	.4675	.5004	.6945	.6749	-63.417	-19.414	[illegible]	[illegible]
10	7.7531	7.9913	.6563	7.094	7.621	.0777	.4757	.4782	.4943	.6845	.6735	-63.714	[illegible]	[illegible]	[illegible]
11	7.8616	8.0455	.6647	6.973	7.479	.0836	.4858	.4877	.4870	.6735	.6719	-64.027	-20.553	[illegible]	[illegible]
12	7.9703	8.1003	.6730	6.851	7.542	.0874	.4930	.4943	.4736	.6685	.6676	-64.360	-21.036	.524	[illegible]
13	8.0734	8.1559	.6812	6.756	7.849	.0890	.4972	.4980	.4716	.6637	.6605	-64.714	-21.467	[illegible]	[illegible]
14	8.1837	8.2123	.6893	6.659	8.139	.0906	.5005	.5007	.4630	.6535	.6533	-65.094	-21.839	[illegible]	[illegible]
15	8.2937	8.2701	.6973	6.563	8.234	.1105	.5179	.5176	.4540	.6435	.6561	-65.502	-22.135	[illegible]	[illegible]
16	8.4125	8.3331	.7053	6.483	8.231	.1439	.5467	.5453	.4445	.6179	.6666	-65.938	-22.343	[illegible]	[illegible]
17	8.5250	8.3930	.7133	6.402	8.483	.1756	.5746	.5734	.4359	.5925	.6702	-66.398	-22.439	[illegible]	[illegible]
18	8.6403	8.4536	.7213	6.333	9.157	.1934	.5878	.5561	.4268	.5795	.6764	-66.871	-22.392	[illegible]	[illegible]
19	8.7575	8.5253	.7294	6.231	10.041	.2056	.6015	.5393	.4179	.5660	.6769	-67.349	-22.182	[illegible]	[illegible]
20	8.8775	8.5966	.7375	6.244	11.110	.2217	.6166	.5140	.4095	.5510	.6780	-67.830	-21.836	-8.570	[illegible]
21	9.0000	8.6639	.7453	6.212	12.433	.2334	.6345	.5115	.4022	.5333	.6830	-68.316	-21.371	-9.607	13.189

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.6400	.5354	-1.932	7.239	.0842	.4225	.4223	.3727	.7293	0.0000	48.817	-7.239	-39.941	[illegible]
2	7.6765	7.6812	.5093	-2.846	7.402	.0849	.4408	.4408	.3922	.7145	0.0000	47.988	-7.402	[illegible]	[illegible]
3	7.7330	7.7233	.5219	-3.549	7.574	.0858	.4569	.4570	.4084	.7013	0.0000	47.261	-7.574	[illegible]	[illegible]
4	7.7930	7.7660	.5315	-4.133	7.743	.0874	.4696	.4598	.4197	.6924	0.0000	46.746	-7.743	[illegible]	[illegible]
5	7.8314	7.8095	.5387	-4.561	7.923	.0899	.4795	.4748	.4267	.6853	0.0000	46.339	-7.923	[illegible]	[illegible]
6	7.8774	7.8540	.5437	-4.856	8.094	.0955	.4889	.4892	.4305	.6785	0.0000	45.992	-8.094	[illegible]	[illegible]
7	7.9223	7.8993	.5472	-5.036	8.253	.1020	.4968	.4971	.4317	.6733	0.0000	45.668	-8.263	[illegible]	[illegible]
8	7.9664	7.9450	.5492	-5.125	8.425	.1059	.5034	.5136	.4312	.6690	0.0000	45.360	-8.425	[illegible]	[illegible]
9	8.0102	7.9925	.5505	-5.080	8.576	.1110	.5051	.5153	.4283	.6694	0.0000	45.080	-8.576	-12.750	[illegible]
10	8.0539	8.0400	.5524	-4.715	8.712	.1137	.5056	.5158	.4232	.6715	0.0000	44.844	-8.712	[illegible]	[illegible]
11	8.0977	8.0879	.5533	-4.368	8.829	.1166	.5051	.5152	.4163	.6747	0.0000	44.679	-8.829	[illegible]	[illegible]
12	8.1415	8.1363	.5524	-4.175	8.926	.1159	.5022	.5023	.4105	.6790	0.0000	44.613	-8.926	[illegible]	[illegible]
13	8.1863	8.1851	.5495	-4.159	9.001	.1146	.4971	.4971	.4055	.6845	0.0000	44.656	-9.001	2.290	[illegible]
14	8.2313	8.2344	.5451	-4.102	9.043	.1124	.4909	.4909	.3993	.6907	0.0000	44.769	-9.048	[illegible]	[illegible]
15	8.2773	8.2841	.5421	-3.415	9.063	.1115	.4865	.4864	.3916	.6971	0.0000	44.985	-9.063	[illegible]	[illegible]
16	8.3251	8.3345	.5370	-2.007	9.058	.1132	.4877	.4876	.3813	.6994	0.0000	45.071	-9.058	[illegible]	[illegible]
17	8.3753	8.3859	.5302	-.613	9.061	.1278	.4867	.4865	.3634	.7032	0.0000	45.429	-9.061	[illegible]	[illegible]
18	8.4286	8.4381	.5210	-.062	9.086	.1370	.4801	.4800	.3531	.7094	0.0000	46.180	-9.086	[illegible]	[illegible]
19	8.4857	8.4913	.5093	.431	9.127	.1454	.4683	.4682	.3311	.7201	0.0000	47.357	-9.127	[illegible]	[illegible]
20	8.5468	8.5452	.5335	1.072	9.170	.1558	.4520	.4520	.3019	.7347	0.0000	48.892	-9.170	42.723	[illegible]
21	8.6139	8.6000	.5753	1.909	9.213	.1654	.4319	.4321	.2654	.7525	0.0000	50.814	-9.213	46.652	[illegible]

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	.4	.5	1.2	1.6	2.1	2.9	3.0	5.0	7.0	8.0	9.1	10.3	10.4
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	.4	.8	1.2	1.5	2.1	3.0	3.0	5.0	7.0	8.0	9.1	10.3	10.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 23

TEST POINT TITLE = 212050615050

FLOW = 13.09 SPEED = 10195.8 PRESSURE RATIO = 1.371 ISENTROPIC EFFY = .8321 POLYTROPIC EFFY = .8394 DEL T/T = .1133

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	----ROTOR---- ISEN EFFY	----STAGE---- PRESSURE RATIO	----STAGE---- ISEN EFFY	FLOW/ (CHOKE FLOW)
1	212050615050	CONVERGED AFTER 23 PASSES	13.095	10195.8	1.410	.908	1.371	.832	.34386

3. TEST POINT 212051715560 (60%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0695	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	20.93	0.000	.0750
2	6.2255	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	19.74	0.000	.0750
3	6.3851	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	18.54	0.000	.0750
4	6.5395	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	17.33	0.000	.0750
5	6.6934	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	16.11	0.000	.0750
6	6.8473	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	14.89	0.000	.0750
7	6.9993	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	13.67	0.000	.0750
8	7.1517	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	12.46	0.000	.0750
9	7.3025	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	11.25	0.000	.0750
10	7.4535	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	10.06	0.000	.0750
11	7.6032	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	8.88	0.000	.0750
12	7.7527	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	7.73	0.000	.0750
13	7.9013	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	6.61	0.000	.0750
14	8.0505	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	5.53	0.000	.0750
15	8.1995	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	4.50	0.000	.0750
16	8.3450	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	3.53	0.000	.0750
17	8.4955	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	2.63	0.000	.0750
18	8.6443	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	1.81	0.000	.0750
19	8.7932	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	1.09	0.000	.0750
20	8.9416	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	.48	0.000	.0750
21	9.0900	203.94	0.00	203.94	518.688	515.239	14.696	14.357	.1830	0.00	0.00	0.000	.0750

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3740	220.71	0.00	220.71	518.688	514.649	14.696	14.299	.1981	0.00	20.83	-205.758	.0747
2	6.5139	221.73	0.00	221.73	518.688	514.611	14.696	14.296	.1991	0.00	19.58	-134.967	.0747
3	6.6514	222.65	0.00	222.65	518.688	514.577	14.696	14.292	.1999	0.00	18.34	-106.883	.0747
4	6.7899	223.50	0.00	223.50	518.688	514.546	14.696	14.289	.2007	0.00	17.10	-90.955	.0747
5	6.9249	224.25	0.00	224.25	518.688	514.518	14.696	14.286	.2013	0.00	15.85	-79.857	.0747
6	7.0530	224.91	0.00	224.91	518.688	514.494	14.696	14.284	.2019	0.00	14.60	-71.010	.0747
7	7.1945	225.47	0.00	225.47	518.688	514.473	14.696	14.282	.2025	0.00	13.35	-63.354	.0747
8	7.3254	225.91	0.00	225.91	518.688	514.456	14.696	14.280	.2029	0.00	12.10	-56.449	.0747
9	7.4613	226.22	0.00	226.22	518.688	514.445	14.696	14.279	.2031	0.00	10.84	-50.131	.0747
10	7.5951	226.39	0.00	226.39	518.688	514.439	14.696	14.279	.2033	0.00	9.60	-44.361	.0747
11	7.7242	226.35	0.00	226.35	518.688	514.439	14.696	14.279	.2033	0.00	8.36	-39.132	.0747
12	7.8613	226.15	0.00	226.15	518.688	514.447	14.696	14.280	.2031	0.00	7.14	-34.439	.0747
13	7.9945	225.75	0.00	225.75	518.688	514.462	14.696	14.281	.2027	0.00	5.94	-30.269	.0747
14	8.1232	225.12	0.00	225.12	518.688	514.486	14.696	14.283	.2021	0.00	4.77	-26.587	.0747
15	8.2574	224.24	0.00	224.24	518.688	514.519	14.696	14.287	.2013	0.00	3.64	-23.347	.0747
16	8.3973	223.10	0.00	223.10	518.688	514.561	14.696	14.291	.2003	0.00	2.55	-20.500	.0747
17	8.5352	221.67	0.00	221.67	518.688	514.614	14.696	14.296	.1990	0.00	1.51	-17.994	.0747
18	8.6711	219.95	0.00	219.95	518.688	514.677	14.696	14.302	.1975	0.00	.54	-15.783	.0748
19	8.8094	217.91	0.00	217.91	518.688	514.751	14.696	14.309	.1956	0.00	-.36	-13.824	.0748
20	8.9453	215.51	0.00	215.51	518.688	514.837	14.696	14.318	.1934	0.00	-1.18	-12.079	.0748
21	9.0930	212.73	0.00	212.73	518.688	514.936	14.696	14.327	.1909	0.00	-1.91	-10.518	.0748

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	239.91	0.00	239.91	518.688	513.916	14.695	14.226	.2155	0.00	20.54	-83.031	.0745
2	6.7255	241.19	0.00	241.19	518.688	513.865	14.695	14.223	.2167	0.00	19.31	-132.308	.0745
3	6.8435	242.55	0.00	242.55	518.688	513.810	14.695	14.218	.2179	0.00	18.07	-204.521	.0744
4	6.9705	243.92	0.00	243.92	518.688	513.755	14.695	14.212	.2192	0.00	16.81	-283.591	.0744
5	7.0923	245.28	0.00	245.28	518.688	513.699	14.695	14.207	.2204	0.00	15.54	-302.274	.0744
6	7.2131	246.58	0.00	246.58	518.688	513.647	14.695	14.202	.2216	0.00	14.25	-239.001	.0744
7	7.3333	247.75	0.00	247.75	518.688	513.598	14.695	14.197	.2227	0.00	12.93	-161.566	.0744
8	7.4530	248.79	0.00	248.79	518.688	513.556	14.695	14.193	.2235	0.00	11.60	-107.491	.0743
9	7.5724	249.62	0.00	249.62	518.688	513.521	14.695	14.190	.2243	0.00	10.24	-74.725	.0743
10	7.6916	250.20	0.00	250.20	518.688	513.497	14.695	14.187	.2249	0.00	8.87	-54.094	.0743
11	7.8109	250.49	0.00	250.49	518.688	513.485	14.695	14.186	.2251	0.00	7.49	-40.489	.0743
12	7.9302	250.45	0.00	250.45	518.688	513.487	14.695	14.186	.2251	0.00	6.10	-32.068	.0743
13	8.0500	250.05	0.00	250.05	518.688	513.504	14.695	14.188	.2247	0.00	4.72	-25.916	.0743
14	8.1703	249.25	0.00	249.25	518.688	513.536	14.695	14.191	.2240	0.00	3.35	-21.475	.0743
15	8.2913	248.05	0.00	248.05	518.688	513.585	14.695	14.195	.2229	0.00	1.99	-18.167	.0744
16	8.4133	246.43	0.00	246.43	518.688	513.653	14.695	14.203	.2214	0.00	.65	-15.641	.0744
17	8.5374	244.35	0.00	244.35	518.688	513.737	14.695	14.211	.2196	0.00	-.65	-13.655	.0744
18	8.6625	241.95	0.00	241.95	518.688	513.836	14.695	14.220	.2173	0.00	-1.92	-12.072	.0745
19	8.7595	238.99	0.00	238.99	518.688	513.956	14.695	14.232	.2146	0.00	-3.15	-10.757	.0745
20	8.9135	235.43	0.00	235.43	518.688	514.090	14.695	14.245	.2115	0.00	-4.33	-9.649	.0745
21	9.0500	231.40	0.00	231.40	518.688	514.241	14.695	14.260	.2080	0.00	-5.47	-8.690	.0746

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	257.45	0.00	257.45	518.688	513.175	14.695	14.156	.2318	0.00	20.32	-388.054	.0742
2	6.8647	260.23	0.00	260.23	518.688	513.073	14.695	14.146	.2340	0.00	19.22	425.964	.0742
3	6.9795	262.57	0.00	262.57	518.688	512.967	14.695	14.136	.2362	0.00	18.07	155.435	.0741
4	7.0912	265.15	0.00	265.15	518.688	512.856	14.695	14.126	.2385	0.00	16.87	110.039	.0741
5	7.2031	267.61	0.00	267.61	518.688	512.750	14.695	14.115	.2407	0.00	15.61	99.509	.0741
6	7.3142	269.95	0.00	269.95	518.688	512.644	14.695	14.105	.2423	0.00	14.29	109.776	.0740
7	7.4245	272.13	0.00	272.13	518.688	512.545	14.695	14.096	.2443	0.00	12.91	160.790	.0740
8	7.5341	274.14	0.00	274.14	518.688	512.457	14.695	14.087	.2456	0.00	11.48	655.048	.0740
9	7.6433	275.77	0.00	275.77	518.688	512.382	14.695	14.080	.2481	0.00	9.99	-209.672	.0739
10	7.7522	277.00	0.00	277.00	518.688	512.326	14.695	14.074	.2492	0.00	8.46	-82.412	.0739
11	7.8609	277.79	0.00	277.79	518.688	512.290	14.695	14.071	.2500	0.00	6.90	-49.632	.0739
12	7.9693	278.03	0.00	278.03	518.688	512.276	14.695	14.070	.2502	0.00	5.32	-34.691	.0739
13	8.0731	277.34	0.00	277.34	518.688	512.287	14.695	14.071	.2500	0.00	3.73	-26.205	.0739
14	8.1891	277.04	0.00	277.04	518.688	512.324	14.695	14.074	.2493	0.00	2.13	-20.771	.0739
15	8.2933	275.66	0.00	275.66	518.688	512.387	14.695	14.080	.2480	0.00	.53	-17.152	.0739
16	8.4120	273.70	0.00	273.70	518.688	512.477	14.695	14.089	.2462	0.00	-1.04	-14.779	.0740
17	8.5255	271.19	0.00	271.19	518.688	512.590	14.695	14.100	.2440	0.00	-2.56	-13.234	.0740
18	8.6403	268.21	0.00	268.21	518.688	512.723	14.695	14.113	.2412	0.00	-4.05	-12.157	.0740
19	8.7532	264.77	0.00	264.77	518.688	512.875	14.695	14.127	.2381	0.00	-5.49	-11.338	.0741
20	8.8773	260.92	0.00	260.92	518.688	513.043	14.695	14.144	.2346	0.00	-6.89	-10.722	.0742
21	9.0000	256.71	0.00	256.71	518.688	513.224	14.695	14.161	.2313	0.00	-8.25	-10.317	.0742

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.337	5.070	-70.320	9.353	0.0000	721.0	.6884	765.67	19.434	561.757	1.000	0.000	1.0000	1.0000
2	-61.313	5.246	-70.459	9.145	0.0000	733.2	.6995	778.01	19.614	563.233	1.000	0.000	1.0000	1.0000
3	-61.375	5.372	-70.537	8.911	0.0000	745.4	.7106	790.26	19.796	564.720	1.000	0.000	1.0000	1.0000
4	-62.010	5.418	-70.705	8.695	0.0000	757.4	.7217	802.47	19.981	566.218	1.000	0.000	1.0000	1.0000
5	-62.309	5.304	-70.820	8.511	0.0000	769.3	.7326	814.56	20.159	567.729	1.000	0.000	1.0000	1.0000
6	-62.587	3.939	-70.935	8.348	0.0000	781.2	.7435	826.54	20.353	569.251	1.000	0.000	1.0000	1.0000
7	-62.859	9.497	-71.055	8.197	0.0000	793.0	.7542	838.40	20.552	570.787	1.000	0.000	1.0000	1.0000
8	-63.135	4.511	-71.135	8.055	0.0000	804.7	.7648	850.11	20.743	572.336	1.000	0.000	1.0000	1.0000
9	-63.418	3.941	-71.335	7.917	0.0000	815.4	.7753	861.68	20.945	573.900	1.000	0.000	1.0000	1.0000
10	-63.714	2.910	-71.502	7.759	0.0000	828.0	.7856	873.10	21.131	575.463	1.000	0.000	1.0000	1.0000
11	-64.026	1.753	-71.593	7.657	0.0000	839.6	.7959	884.37	21.353	577.086	1.000	0.000	1.0000	1.0000
12	-64.358	.530	-71.839	7.531	0.0000	851.2	.8058	895.51	21.571	578.714	1.000	0.000	1.0000	1.0000
13	-64.713	-.910	-72.152	7.433	0.0000	862.3	.8157	906.54	21.736	580.370	1.000	0.000	1.0000	1.0000
14	-65.093	-2.247	-72.425	7.332	0.0000	874.7	.8255	917.48	22.011	582.055	1.000	0.000	1.0000	1.0000
15	-65.501	-3.039	-72.727	7.225	0.0000	886.5	.8353	928.36	22.241	583.733	1.000	0.000	1.0000	1.0000
16	-65.939	-4.335	-73.055	7.119	0.0000	898.5	.8450	939.22	22.478	585.351	1.000	0.000	1.0000	1.0000
17	-66.399	-5.422	-73.415	7.015	0.0000	910.5	.8547	950.11	22.724	587.366	1.000	0.000	1.0000	1.0000
18	-66.874	-7.034	-73.795	6.922	0.0000	922.9	.8644	961.09	22.978	589.234	1.000	0.000	1.0000	1.0000
19	-67.352	-7.734	-74.135	6.844	0.0000	935.4	.8743	972.19	23.243	591.161	1.000	0.000	1.0000	1.0000
20	-67.832	-8.572	-74.515	6.793	0.0000	946.2	.8843	983.46	23.519	593.152	1.000	0.000	1.0000	1.0000
21	-68.316	-9.637	-75.045	6.732	0.0000	951.3	.8945	994.95	23.807	595.213	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.9973	291.07	141.94	323.65	535.976	527.294	15.379	15.468	.2871	25.93	22.32	6.199	.0789
2	7.0044	294.31	137.75	324.35	535.774	527.022	15.351	15.442	.2893	25.08	20.85	7.738	.0789
3	7.1039	297.50	134.63	325.53	535.633	525.795	15.345	15.420	.2898	24.34	19.34	10.256	.0787
4	7.2134	300.53	132.07	323.54	535.557	526.610	15.333	15.402	.2913	23.70	17.79	14.948	.0787
5	7.3159	304.32	130.12	330.97	535.544	526.465	15.333	15.399	.2939	23.15	16.19	25.944	.0786
6	7.4159	307.94	129.65	333.64	535.583	526.357	15.341	15.379	.2962	22.68	14.56	74.184	.0786
7	7.5137	311.24	127.45	336.33	535.653	526.277	15.355	15.374	.2985	22.27	12.90	-123.324	.0786
8	7.6155	314.35	126.53	339.35	535.750	526.232	15.365	15.372	.3003	21.92	11.20	-39.021	.0786
9	7.7134	317.01	125.37	341.03	535.980	526.237	15.381	15.374	.3028	21.66	9.49	-23.929	.0786
10	7.8107	319.50	125.07	342.55	536.124	526.373	15.391	15.378	.3044	21.57	7.76	-20.724	.0786
11	7.9177	320.19	125.21	344.15	536.360	526.542	15.413	15.385	.3055	21.51	6.04	-18.359	.0786
12	8.0043	320.98	125.23	344.81	536.579	526.725	15.425	15.393	.3060	21.47	4.33	-17.307	.0786
13	8.1021	320.33	125.03	344.75	536.776	526.925	15.435	15.402	.3059	21.45	2.63	-17.331	.0786
14	8.2030	320.15	123.63	343.34	536.937	527.133	15.443	15.413	.3051	21.43	.94	-18.029	.0787
15	8.2939	319.31	125.73	342.25	537.173	527.464	15.441	15.423	.3033	21.56	-.73	-19.482	.0787
16	8.3943	315.35	125.34	339.72	537.477	527.912	15.435	15.434	.3012	21.83	-2.34	-21.823	.0786
17	8.5015	311.57	125.54	335.38	537.737	528.359	15.425	15.445	.2991	22.10	-3.88	-25.407	.0786
18	8.6023	307.79	125.42	332.36	537.799	528.644	15.413	15.455	.2944	22.17	-5.36	-31.267	.0786
19	8.7125	303.35	124.15	327.79	537.842	528.938	15.397	15.466	.2903	22.25	-6.78	-42.631	.0787
20	8.8213	293.39	122.73	322.67	537.867	529.238	15.373	15.476	.2857	22.37	-8.12	-75.559	.0787
21	8.9340	292.93	121.27	317.04	537.871	529.541	15.351	15.483	.2805	22.49	-3.38	-1665.883	.0787

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	4.253	-63.340	4.992	.0238	736.7	.5877	662.47	19.341	[illegible]	1.115	[illegible]	[illegible]	[illegible]
2	-59.431	4.231	-64.257	4.825	.0229	748.1	.6012	677.62	19.713	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	-59.877	4.043	-64.237	4.659	.0220	759.4	.6141	691.98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	-60.275	3.648	-64.768	4.493	.0211	770.4	.6264	705.70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	-60.624	3.149	-64.334	4.330	.0203	781.4	.6381	718.85	20.239	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	-60.939	2.779	-65.111	4.173	.0193	792.2	.6494	731.46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-61.234	2.477	-65.238	4.024	.0185	802.8	.6602	743.95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	-61.522	2.148	-65.409	3.885	.0175	813.4	.6707	755.36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	-61.810	1.734	-65.373	3.763	.0166	823.8	.6806	766.59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	-62.103	1.319	-65.798	3.657	.0135	834.2	.6895	776.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	-62.406	.877	-65.376	3.572	.0200	844.6	.6984	786.52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	-62.725	.442	-65.233	3.511	.0216	855.0	.7067	796.26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	-63.064	-.010	-66.337	3.473	.0232	865.4	.7151	805.92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	-63.429	-.303	-66.883	3.438	.0247	875.8	.7235	813.60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	-63.825	-1.043	-67.291	3.406	.0283	886.4	.7312	824.92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	-64.252	-1.522	-67.743	3.446	.0333	897.1	.7382	832.79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	-64.709	-1.770	-69.257	3.543	.0392	908.0	.7455	841.34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	-65.185	-1.826	-69.346	3.621	.0419	919.2	.7542	851.34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	-65.674	-2.039	-69.389	3.711	.0440	930.6	.7630	861.37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	-66.176	-2.426	-69.392	3.815	.0455	942.2	.7721	872.09	[illegible]	592.217	[illegible]	[illegible]	[illegible]	[illegible]
21	-66.694	-3.111	-70.024	3.930	.0434	954.2	.7815	882.96	23.175	594.096	1.113	[illegible]	[illegible]	[illegible]

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.115 ISEN. EFF.= .915 POLY. EFF.= .917 DELTA T ON T = [illegible]

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	343.67	241.01	419.75	548.890	534.290	17.693	16.095	.3639	35.04	24.67	[illegible]	[illegible]
2	7.1693	347.15	236.14	419.65	548.661	534.055	17.667	16.074	.3701	[illegible]	[illegible]	[illegible]	[illegible]
3	7.2573	350.37	231.83	420.13	548.427	533.827	17.649	16.053	.3704	[illegible]	[illegible]	[illegible]	[illegible]
4	7.3479	354.04	227.50	420.53	548.262	533.608	17.632	16.033	.3711	[illegible]	18.73	[illegible]	[illegible]
5	7.4394	357.95	223.72	421.77	548.137	533.347	17.614	16.014	.3720	32.03	16.76	[illegible]	[illegible]
6	7.5220	361.09	220.25	422.99	548.022	533.197	17.613	15.996	.3731	[illegible]	[illegible]	[illegible]	[illegible]
7	7.6070	364.65	217.01	424.34	547.917	532.996	17.604	15.981	.3744	[illegible]	[illegible]	[illegible]	[illegible]
8	7.6925	367.33	214.00	425.34	547.833	532.820	17.631	15.969	.3756	[illegible]	[illegible]	[illegible]	[illegible]
9	7.7770	370.69	211.42	425.74	547.737	532.707	17.630	15.959	.3763	[illegible]	[illegible]	[illegible]	[illegible]
10	7.8612	372.01	210.52	427.44	547.980	532.848	17.597	15.952	.3772	[illegible]	[illegible]	[illegible]	[illegible]
11	7.9458	372.77	209.39	427.65	548.169	533.015	17.594	15.949	.3773	[illegible]	[illegible]	[illegible]	[illegible]
12	8.0304	372.83	208.56	427.20	548.348	533.217	17.563	15.947	.3763	[illegible]	[illegible]	[illegible]	[illegible]
13	8.1133	372.07	207.40	426.00	548.497	533.460	17.581	15.950	.3757	[illegible]	[illegible]	[illegible]	[illegible]
14	8.2022	370.43	206.15	423.93	548.624	533.733	17.577	15.955	.3738	[illegible]	[illegible]	[illegible]	[illegible]
15	8.2898	365.91	203.28	420.32	548.962	534.281	17.533	15.963	.3709	[illegible]	[illegible]	[illegible]	[illegible]
16	8.3733	361.49	207.74	416.93	549.585	535.102	17.532	15.974	.3674	[illegible]	[illegible]	[illegible]	[illegible]
17	8.4712	355.06	203.59	411.92	550.011	535.952	17.507	15.989	.3624	[illegible]	[illegible]	[illegible]	[illegible]
18	8.5657	348.81	207.45	405.64	550.147	536.500	17.473	16.007	.3563	[illegible]	[illegible]	[illegible]	[illegible]
19	8.6631	341.60	206.03	398.92	550.207	537.101	17.443	16.028	.3499	[illegible]	[illegible]	[illegible]	[illegible]
20	8.7636	333.35	204.70	391.15	550.446	537.767	17.413	16.052	.3430	[illegible]	[illegible]	[illegible]	[illegible]
21	8.8579	324.04	203.53	382.07	550.649	538.515	17.383	16.080	.3353	32.14	-9.38	1665.883	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.438	-55.255	3.750	.0432	756.0	.5456	619.16	19.705	556.047	1.204	.058	.9335	[illegible]
2	-53.098	2.270	-56.756	3.653	.0462	765.8	.5581	633.25	19.854	567.272	1.202	.058	[illegible]	[illegible]
3	-53.651	1.836	-57.137	3.535	.0443	775.3	.5703	646.94	20.014	568.496	1.201	.057	[illegible]	[illegible]
4	-54.156	1.105	-57.574	3.413	.0425	784.8	.5822	660.26	20.167	569.713	1.200	.057	[illegible]	[illegible]
5	-54.616	.234	-57.921	3.305	.0407	794.2	.5937	673.23	20.325	570.940	1.199	.057	[illegible]	[illegible]
6	-55.031	-.175	-58.233	3.202	.0390	803.4	.6050	685.87	20.482	572.163	1.198	.057	[illegible]	[illegible]
7	-55.418	-.311	-58.521	3.111	.0369	812.5	.6161	698.31	20.644	573.387	1.198	.056	[illegible]	[illegible]
8	-55.756	-.339	-58.794	3.039	.0343	821.6	.6268	710.34	20.807	574.614	1.198	.056	.9405	[illegible]
9	-56.108	-.253	-59.034	2.986	.0337	830.6	.6369	721.70	20.367	575.847	1.198	.056	.9412	.9427
10	-56.444	-.153	-59.404	2.959	.0369	839.5	.6449	730.87	21.038	577.091	1.197	[illegible]	[illegible]	[illegible]
11	-56.791	.044	-59.745	2.964	.0400	848.7	.6527	739.85	21.231	578.350	1.197	.057	[illegible]	[illegible]
12	-57.126	.348	-60.129	3.003	.0431	857.7	.6603	748.59	21.367	579.629	1.197	.057	[illegible]	[illegible]
13	-57.486	.744	-60.585	3.079	.0463	866.8	.6677	757.10	21.505	580.931	1.196	.057	[illegible]	[illegible]
14	-57.863	1.208	-61.059	3.190	.0534	875.1	.6749	765.49	21.649	[illegible]	1.196	.058	[illegible]	[illegible]
15	-58.294	1.724	-61.519	3.335	.0567	885.4	.6802	771.91	21.757	533.625	1.194	.058	[illegible]	[illegible]
16	-58.738	2.237	-62.235	3.517	.0678	895.0	.6837	776.51	21.840	535.033	1.193	.059	[illegible]	[illegible]
17	-59.234	2.934	-62.971	3.737	.0734	904.8	.6874	781.26	21.930	536.495	1.191	.060	[illegible]	[illegible]
18	-59.763	3.772	-63.754	3.990	.0831	914.9	.6936	788.75	22.075	588.015	1.189	.061	[illegible]	[illegible]
19	-60.321	4.402	-64.533	4.274	.0880	925.3	.6998	796.24	22.225	589.597	1.187	.061	[illegible]	[illegible]
20	-60.913	4.737	-65.496	4.532	.0931	936.0	.7060	803.72	22.353	591.251	1.185	.061	.8117	[illegible]
21	-61.540	4.918	-66.453	4.913	.0937	947.2	.7120	811.12	22.544	592.986	1.183	.062	.7977	.8025

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.193 ISEN. EFF.= .897 POLY. EFF.= .899 DELTA T ON T = .058

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2520	427.99	352.01	554.20	553.944	538.502	19.324	16.441	.4865	39.44	24.97	59.510	.0821
2	7.3375	433.03	345.03	554.33	553.629	538.176	19.297	16.411	.4867	38.63	22.63	-79.465	[illegible]
3	7.4110	437.13	340.33	554.33	553.407	537.953	19.273	16.391	.4863	37.95	20.43	[illegible]	[illegible]
4	7.4840	440.44	335.33	554.17	553.244	537.805	19.261	16.380	.4867	37.37	18.28	-20.674	[illegible]
5	7.5553	443.16	332.19	553.55	553.121	537.711	19.251	16.375	.4865	36.86	16.20	-17.453	[illegible]
6	7.6244	445.45	328.33	553.41	553.028	537.658	19.247	16.374	.4861	36.40	14.17	-16.196	[illegible]
7	7.6937	447.62	324.75	553.01	552.946	537.612	19.247	16.378	.4858	35.96	12.22	-15.946	[illegible]
8	7.7707	449.38	321.43	552.48	552.833	537.608	19.251	16.387	.4854	35.57	10.34	-16.399	[illegible]
9	7.8417	450.37	319.58	551.59	552.905	537.696	19.253	16.399	.4846	35.27	8.52	-17.443	[illegible]
10	7.9130	448.90	318.07	550.17	553.238	538.164	19.255	16.416	.4831	35.32	6.77	-19.859	[illegible]
11	[illegible]	446.98	317.43	549.19	553.559	538.660	19.253	16.436	.4811	35.37	5.07	[illegible]	[illegible]
12	8.0577	444.12	315.83	[illegible]	553.871	539.218	19.253	16.460	.4785	35.50	3.44	[illegible]	[illegible]
13	8.1315	440.52	315.34	542.17	554.175	539.826	19.245	16.489	.4753	35.66	1.85	[illegible]	[illegible]
14	8.2065	436.09	315.10	538.02	554.457	540.480	19.237	16.522	.4714	35.85	.31	-35.737	[illegible]
15	8.2832	429.87	319.50	533.0	555.089	541.258	19.222	16.560	.4663	36.43	-1.19	[illegible]	[illegible]
16	8.3623	418.55	320.29	527.30	556.093	543.063	19.204	16.583	.4603	37.48	-2.63	[illegible]	[illegible]
17	8.4441	408.05	324.01	521.05	557.112	544.626	19.193	16.651	.4548	38.45	-4.01	[illegible]	[illegible]
18	8.5233	393.13	324.15	514.17	557.619	545.724	19.175	16.705	.4443	39.08	-5.35	-126.849	[illegible]
19	8.6194	391.61	324.70	507.13	568.206	546.983	19.167	16.764	.4410	39.81	-6.68	[illegible]	[illegible]
20	8.7075	379.66	325.31	500.37	568.914	548.179	19.167	16.828	.4353	40.64	-8.02	[illegible]	[illegible]
21	8.8019	369.25	327.90	493.83	569.767	549.572	19.174	16.895	.4291	41.60	-9.37	********	.0827

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-44.731	4.274	.0726	775.9	.5285	602.14	[illegible]	550.333	1.315	.087	[illegible]	[illegible]
2	-41.117	1.238	-45.308	4.186	.0679	783.7	.5406	615.64	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	-41.772	.731	-45.378	4.105	.0637	791.5	.5514	627.88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	-42.408	-.024	-46.439	4.027	.0638	799.4	.5613	633.09	20.255	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	-43.023	-.808	-46.352	3.954	.0612	807.1	.5700	649.57	20.449	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	-43.612	-1.233	-47.513	3.903	.0555	814.8	.5794	657.54	20.535	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-44.183	-1.213	-48.023	3.865	.0553	822.4	.5880	669.33	20.535	574.717	[illegible]	[illegible]	[illegible]	[illegible]
8	-44.685	-.836	-48.536	3.851	.0523	830.0	.5962	679.67	20.838	575.784	[illegible]	[illegible]	[illegible]	[illegible]
9	-45.184	-.443	-49.048	3.864	.0505	837.5	.6036	687.15	20.979	576.381	[illegible]	[illegible]	[illegible]	[illegible]
10	-45.668	.137	-49.580	3.912	.0354	845.2	.6079	692.36	21.064	577.461	[illegible]	[illegible]	[illegible]	[illegible]
11	-46.145	.879	-50.145	4.002	.0601	852.9	.6120	697.36	21.163	578.361	[illegible]	[illegible]	[illegible]	[illegible]
12	-46.622	1.787	-50.762	4.140	.0647	860.5	.6159	702.13	21.290	580.043	[illegible]	[illegible]	[illegible]	[illegible]
13	-47.106	2.852	-51.432	4.325	.0635	868.5	.6195	706.59	21.393	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	-47.601	4.041	-52.151	4.560	.0741	876.5	.6229	710.90	21.492	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	-48.113	5.320	-52.930	4.843	.0850	884.7	.6231	712.90	21.512	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	-48.948	6.634	-53.325	5.177	.1017	893.2	.6203	703.67	21.513	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	-49.203	7.923	-54.773	5.564	.1176	901.3	.6175	707.64	21.533	586.863	[illegible]	[illegible]	[illegible]	[illegible]
18	-49.777	9.034	-55.778	6.000	.1246	911.0	.6138	[illegible]	21.625	587.421	[illegible]	[illegible]	[illegible]	[illegible]
19	-50.332	9.952	-56.510	6.474	.1313	920.3	.6139	711.73	21.722	588.358	[illegible]	[illegible]	[illegible]	[illegible]
20	-50.858	10.513	-57.331	6.994	.1395	930.0	.6208	713.52	21.919	530.320	[illegible]	.212	[illegible]	[illegible]
21	-51.361	13.830	-58.334	7.543	.1431	940.1	.6212	714.95	21.915	531.385	1.385	.040	[illegible]	[illegible]

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.309 ISEN. EFF.= .895 POLY. EFF.= .899 DELTA T ON T = .089

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	545.39	453.00	719.32	530.583	537.661	21.262	16.251	.6313	40.68	19.72	[illegible]	[illegible]
2	7.5030	537.74	453.97	713.51	530.951	538.792	21.323	16.377	[illegible]	[illegible]	17.72	[illegible]	[illegible]
3	7.5573	530.89	459.33	709.27	531.383	539.842	21.391	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	7.6122	524.30	460.27	703.34	531.762	540.798	21.443	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	7.6676	513.45	467.13	698.30	532.008	541.656	21.430	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	7.7240	516.37	463.43	694.0	532.388	542.416	21.533	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	7.7579	311.42	463.33	690.13	532.400	543.051	21.573	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	7.8305	308.53	451.17	686.37	532.653	543.621	21.613	16.946	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	7.8969	505.79	439.21	683.15	532.854	544.211	21.641	17.014	.5965	[illegible]	[illegible]	[illegible]	[illegible]
10	7.9562	449.81	459.73	677.03	533.408	545.224	21.651	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	8.0157	493.99	460.03	675.02	533.942	546.215	21.669	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	8.0732	488.02	460.20	670.73	534.469	547.216	21.673	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	8.1417	481.09	460.35	665.30	535.005	548.249	21.674	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	8.2093	475.38	450.42	661.50	533.542	549.386	21.679	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	8.2731	464.47	493.80	656.33	530.579	550.011	21.673	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	8.3423	449.42	470.88	651.23	530.191	550.887	21.673	17.466	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	8.4131	434.73	476.50	646.37	533.944	555.339	21.693	17.355	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	8.4909	424.58	492.02	642.35	531.897	556.945	21.723	17.530	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	8.5694	414.18	485.48	638.03	532.441	558.657	21.773	17.726	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	8.6510	403.47	492.22	630.43	534.021	558.497	21.843	17.819	.5477	[illegible]	[illegible]	[illegible]	[illegible]
21	8.7359	392.15	493.29	634.38	535.858	562.492	21.934	17.928	.5454	51.83	-5.37	[illegible]	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.859	-30.317	5.774	.0974	795.0	.5584	635.72	20.082	571.134	1.447	.113	.9325	.9360
2	-24.355	2.533	-31.722	5.737	.0930	801.4	.5548	632.19	20.184	571.494	1.451	.120	.9348	.9374
3	-25.303	2.053	-32.516	5.702	.0939	807.2	.5519	623.54	20.297	572.366	1.456	.121	.9354	.930[illegible]
4	-26.030	2.115	-33.533	5.673	.0851	813.0	.5500	627.92	20.393	573.452	1.459	.122	.9367	.9400
5	-27.456	1.451	-34.112	5.655	.0815	819.0	.5491	627.39	20.500	574.254	1.463	.122	.9379	.9412
6	-28.270	1.110	-34.924	5.625	.0751	825.0	.5492	627.95	20.611	575.071	1.465	.123	.9391	.9423
7	-29.033	1.130	-35.713	5.574	.0737	831.1	.5506	623.86	20.730	575.705	1.468	.123	.9411	.9442
8	-29.754	1.506	-36.475	5.723	.0636	837.2	.5526	632.54	20.832	576.754	1.470	.123	.9430	.9460
9	-30.415	2.005	-37.222	5.807	.0672	843.4	.5546	635.19	20.957	577.021	1.471	.124	.9437	.9467
10	-31.033	2.695	-37.906	6.935	.0738	849.8	.5531	633.59	21.022	578.508	1.473	.125	.9371	.9485
11	-31.617	3.595	-38.732	7.115	.0803	856.2	.5519	633.25	21.030	579.421	1.474	.126	.9306	.9343
12	-32.171	4.711	-39.525	7.35[illegible]	.0852	862.8	.5509	632.69	21.140	580.360	1.475	.127	.9239	.9280
13	-32.697	6.010	-40.331	7.534	.0925	869.6	.5499	637.07	21.200	581.328	1.475	.128	.9169	.9214
14	-33.198	7.439	-41.713	8.013	.0993	876.[illegible]	.5439	631.53	21.203	582.327	1.475	.129	.9100	.9148
15	-33.672	9.327	-42.115	8.439	.1134	883.6	.5434	626.09	21.230	583.364	1.475	.131	.8956	.9012
16	-34.122	10.335	-43.346	8.925	.1336	891.0	.5337	619.52	21.193	584.452	1.475	.134	.8747	.8816
17	-34.544	11.713	-44.125	9.462	.1556	898.8	.5227	604.52	21.133	585.501	1.476	.137	.8548	.8625
18	-34.918	12.712	-45.319	10.101	.1652	905.9	.5185	600.65	21.175	586.803	1.478	.140	.8448	.8531
19	-35.221	13.223	-45.935	10.775	.1759	915.3	.5138	596.15	21.217	588.074	1.482	.142	.8348	.8437
20	-35.443	13.327	-46.341	11.497	.1862	924.0	.5085	590.94	21.255	589.400	1.487	.145	.8244	.8340
21	-35.617	13.234	-47.332	12.255	.1975	933.1	.5023	584.77	21.233	590.793	1.493	.149	.8135	.8237

STATION 8 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.472 ISEN. EFF.= .900 POLY. EFF.= .905 DELTA T ON T = .130

STATION 9 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	535.59	620.33	819.79	601.559	545.913	23.952	17.043	.7147	49.18	10.63	-2.404	.0040
2	7.5937	527.78	616.82	811.30	601.540	546.494	23.962	17.160	.7071	49.45	9.91	-3.176	.0044
3	7.6337	521.64	613.19	805.05	601.541	547.899	23.972	17.275	.7035	49.61	9.17	-4.101	.0048
4	7.6[illegible]5	517.05	609.40	798.25	601.537	548.555	23.981	17.366	.6951	49.69	8.41	-5.389	.0051
5	7.7321	513.59	605.70	794.20	601.530	549.375	23.983	17.447	.6903	49.70	7.64	-6.92[illegible]	.0054
6	7.7831	511.38	601.37	789.79	601.519	549.894	23.991	17.517	.6801	49.65	6.85	-9.169	.0057
7	7.8235	510.55	597.92	786.23	601.495	550.333	24.014	17.581	.6827	49.51	6.04	-12.564	.0059
8	7.8794	510.41	593.92	783.11	601.467	550.711	24.020	17.638	.6798	49.32	5.23	-18.411	.0062
9	7.9302	510.38	591.10	780.93	601.684	551.128	24.054	17.689	.6776	49.19	4.40	-31.331	.0063
10	7.9819	507.79	595.33	782.35	602.811	552.091	24.140	17.735	.6737	49.56	3.56	-88.349	[illegible]
11	8.0346	505.69	600.44	785.01	604.021	553.023	24.225	17.778	.6800	49.90	2.69	116.722	[illegible]
12	8.0838	502.53	602.37	784.47	604.870	553.945	24.253	17.918	.6790	50.16	1.60	36.078	[illegible]
13	8.1442	497.35	600.23	779.52	605.155	554.871	24.205	17.854	.6741	50.36	.89	21.937	[illegible]
14	8.2012	492.45	598.97	774.73	605.443	555.777	24.151	17.886	.6694	50.53	-.04	15.142	[illegible]
15	8.2539	483.39	602.34	772.32	606.685	557.330	24.129	17.91[illegible]	.6564	51.25	-1.01	12.993	[illegible]
16	8.3212	469.52	612.92	772.15	608.892	559.562	24.131	17.947	.6553	52.54	-2.03	11.118	[illegible]
17	8.3836	457.23	623.32	771.80	611.129	561.841	24.150	17.979	.6634	53.96	-3.13	10.038	[illegible]
18	8.4528	445.43	625.55	770.51	612.350	563.236	24.156	18.013	.6614	54.41	-4.32	9.436	[illegible]
19	8.5223	440.37	630.10	769.07	613.653	564.725	24.162	18.050	.6593	55.01	-5.64	9.278	[illegible]
20	8.5945	431.38	634.21	767.35	615.080	566.374	24.164	18.093	.6563	55.74	-7.13	10.315	[illegible]
21	8.6533	420.[illegible]	639.15	764.83	616.650	568.301	24.175	18.149	.6535	56.69	-8.95	20.749	.0059

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.847	10.931	-13.141	6.494	.1204	806.4	.4945	567.26	20.142	572.360	[illegible]	[illegible]	[illegible]	[illegible]
2	-13.539	10.626	-20.285	6.666	.1151	811.1	[illegible]	562.39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	-14.428	10.112	-21.234	6.386	.1102	815.9	.4878	559.63	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	-15.301	9.338	-22.230	6.929	.1058	820.8	.4859	558.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	-16.108	8.452	-23.197	7.009	.1013	825.6	.4857	554.88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	-17.067	7.648	-24.115	7.864	.0970	831.0	.4868	560.37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-17.893	7.369	-23.823	7.130	.0918	836.2	.4883	563.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	-18.639	6.716	-25.583	7.245	.0868	841.0	.4925	567.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	-19.388	6.664	-26.629	7.323	.0839	847.0	[illegible]	570.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	-19.888	5.924	-26.818	6.913	.0921	852.5	.4933	569.98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	-20.456	7.477	-27.087	6.561	.1000	858.2	.4917	567.58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	-20.933	8.315	-27.498	9.564	.1076	863.9	.4903	565.53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	-21.372	9.368	-28.462	7.090	.1138	869.9	.4892	565.72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	-21.761	10.538	-29.334	7.674	.1235	875.9	.4886	565.45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	-22.080	11.667	-30.071	7.990	.1417	882.2	.4820	558.27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	-22.314	12.744	-30.429	8.116	.1695	888.8	.4691	544.65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	-22.435	13.552	-30.839	8.454	.1960	895.6	.4559	538.46	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	13.937	-31.634	9.226	.2078	902.8	.4522	520.74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	-22.207	[illegible]	-32.428	10.221	.2199	910.2	.4475	522.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	-21.896	13.574	-33.239	11.443	.2327	918.0	.4424	516.83	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	-21.371	13.159	-34.333	12.962	.2468	926.0	.4347	509.61	20.662	[illegible]	1.645	.189	[illegible]	[illegible]

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.640 ISEN. EFF.= .900 POLY. EFF.= .907 DELTA T ON T = .188

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5746	383.42	618.36	797.37	601.539	[illegible]	23.352	17.373	[illegible]	[illegible]	7.82	[illegible]	[illegible]
2	7.6221	305.77	614.52	[illegible]	601.540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	7.6701	309.61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	7.7182	314.16	605.84	795.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	7.7663	316.91	603.83	795.56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	7.8142	323.56	599.26	795.73	601.519	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	7.8620	[illegible]	[illegible]	796.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	7.9097	333.05	591.63	796.36	601.467	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	7.9575	335.63	589.07	796.93	601.604	549.032	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	8.0057	337.51	594.06	801.14	[illegible]	549.692	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	596.97	805.12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	8.1039	[illegible]	601.25	806.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	8.1544	[illegible]	[illegible]	802.20	605.155	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	8.2059	[illegible]	597.72	797.99	605.443	552.746	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	8.2538	319.60	602.41	795.53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	794.84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	8.3727	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	627.93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	787.77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	785.23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	8.6339	491.85	641.37	784.35	[illegible]	565.767	24.170	17.660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6133	524.30	616.05	809.24	601.539	547.471	23.952	17.214	.7036	49.51	9.06	26.367	.0846
2	7.6772	549.75	610.11	821.25	601.540	545.715	23.962	17.029	.7161	47.98	8.55	-147.846	.0839
3	7.7309	571.12	605.37	832.62	601.541	544.158	23.972	16.865	.7271	46.69	7.89	-27.003	.0834
4	7.7810	587.50	601.35	841.13	601.537	542.975	23.981	16.743	.7353	45.70	7.18	-17.894	.0830
5	7.8235	599.44	598.24	846.89	601.530	542.162	23.989	16.662	.7409	44.94	6.48	-14.542	.0827
6	7.8744	608.05	594.61	850.52	601.519	541.641	23.993	16.613	.7444	44.36	5.63	-13.205	.0825
7	7.9132	614.67	591.14	852.80	601.495	541.294	24.014	16.590	.7465	43.88	5.24	-12.305	.0824
8	7.9533	617.32	589.57	853.76	601.467	541.130	24.023	16.585	.7475	43.70	4.71	-13.321	.0825
9	8.0039	622.10	585.43	854.25	601.504	541.198	24.054	16.597	.7480	43.25	4.25	-14.369	.0825
10	8.0535	621.43	590.71	857.41	602.511	541.959	24.140	16.621	.7502	43.55	3.82	-15.005	.0826
11	8.0943	619.73	596.37	859.35	604.021	542.422	24.220	16.655	.7516	43.98	3.40	-13.313	.0826
12	8.1334	615.95	598.70	858.95	604.470	543.800	24.255	16.700	.7503	44.19	3.00	-21.324	.0826
13	8.1530	609.16	597.43	853.23	605.155	544.902	24.205	16.754	.7445	44.46	2.58	-27.343	.0827
14	8.2235	601.41	596.03	846.76	605.443	546.101	24.151	16.813	.7381	44.75	2.14	-41.096	.0828
15	8.2731	589.03	601.23	841.69	606.886	548.057	24.129	16.893	.7324	45.59	1.65	-80.674	.0829
16	8.3235	571.12	612.75	837.34	608.892	550.431	24.139	16.984	.7270	47.01	1.04	-574.209	.0829
17	8.3744	550.05	624.15	831.95	611.129	553.660	24.150	17.099	.7201	48.61	.28	167.630	.0831
18	8.4232	531.71	628.33	823.15	612.350	556.289	24.153	17.247	.7110	49.76	-.64	100.666	.0834
19	8.4937	508.28	632.81	811.67	613.653	559.150	24.157	17.433	.6993	51.23	-1.71	123.534	.0839
20	8.5433	478.44	637.50	797.13	615.080	562.516	24.165	17.654	.6847	53.12	-2.94	-207.437	.0845
21	8.6139	442.38	642.85	780.36	616.580	566.310	24.176	17.927	.6681	55.47	-4.27	-27.451	.0852

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES CHORD	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	49.510	.693	0.0000	0.0	.7036	809.24	23.952	601.539	1.630	.160	.9368	.9402
2	47.333	-35.741	47.979	-.014	0.0000	0.0	.7161	821.25	23.962	601.540	1.631	.160	.9368	.9410
3	47.255	-33.353	46.692	-.563	0.0000	0.0	.7271	832.62	23.972	601.541	1.631	.160	.9376	.9418
4	46.729	-28.310	45.696	-1.033	0.0000	0.0	.7353	841.13	23.981	601.537	1.632	.160	.9384	.9425
5	46.315	-25.495	44.942	-1.372	0.0000	0.0	.7409	846.89	23.989	601.530	1.632	.160	.9392	.9433
6	45.903	-23.055	44.352	-1.504	0.0000	0.0	.7444	850.52	23.993	601.519	1.633	.160	.9401	.9441
7	45.544	-19.746	43.882	-1.752	0.0000	0.0	.7465	852.80	24.014	601.495	1.634	.160	.9418	.9456
8	45.340	-16.457	43.695	-1.542	0.0000	0.0	.7475	853.76	24.023	601.467	1.635	.160	.9434	.9472
9	45.056	-13.021	43.251	-1.305	0.0000	0.0	.7480	854.25	24.054	601.504	1.637	.160	.9448	.9477
10	44.936	-9.231	43.551	-1.237	0.0000	0.0	.7502	857.41	24.140	602.511	1.643	.162	.9376	.9418
11	44.690	-5.237	43.980	-.903	0.0000	0.0	.7516	859.35	24.220	604.021	1.648	.165	.9314	.9361
12	44.622	-1.312	44.195	-.435	0.0000	0.0	.7503	858.95	24.255	604.470	1.651	.165	.9248	.9299
13	44.575	2.050	44.461	-.234	0.0000	0.0	.7445	853.23	24.205	605.155	1.647	.167	.9174	.9230
14	44.302	6.555	44.745	-.057	0.0000	0.0	.7381	846.76	24.151	605.443	1.643	.167	.9108	.9161
15	44.949	11.015	45.587	.533	0.0000	0.0	.7324	841.69	24.129	606.886	1.642	.170	.8954	.9026
16	45.119	15.656	47.014	1.395	0.0000	0.0	.7270	837.34	24.139	608.892	1.643	.174	.8743	.8827
17	45.478	23.232	48.611	3.133	0.0000	0.0	.7201	831.95	24.150	611.129	1.643	.178	.8539	.8637
18	46.235	30.550	49.763	3.523	0.0000	0.0	.7110	823.15	24.153	612.350	1.644	.181	.8432	.8537
19	47.420	37.236	51.229	3.838	0.0000	0.0	.6993	811.67	24.157	613.653	1.644	.183	.8328	.8433
20	48.944	42.735	53.115	4.172	0.0000	0.0	.6847	797.13	24.165	615.080	1.644	.186	.8202	.8331
21	50.314	43.552	55.470	4.552	0.0000	0.0	.6681	780.36	24.176	616.580	1.645	.189	.8073	.8203

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.640 ISEN. EFF.= .900 POLY. EFF.= .907 DELTA T ON T = .160

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	748.88	482.71	890.90	601.539	535.832	23.814	15.873	.7833	32.31	5.21	[illegible]	.0797
2	7.7535	739.69	472.33	877.99	601.540	537.727	23.820	16.075	.7712	32.60	4.41	[illegible]	[illegible]
3	7.7939	730.78	462.43	864.83	601.541	539.627	23.826	16.278	.7583	32.33	3.69	[illegible]	[illegible]
4	7.8331	722.19	451.90	851.93	601.337	541.460	23.828	16.475	.7458	32.04	2.97	[illegible]	[illegible]
5	7.8724	713.90	442.16	839.73	601.530	543.162	23.829	16.657	.7339	31.77	2.18	[illegible]	[illegible]
6	7.9118	705.95	433.79	828.30	601.513	544.731	23.817	16.820	.7229	31.58	1.89	[illegible]	[illegible]
7	7.9514	698.23	426.30	818.34	601.499	546.165	23.811	16.963	.7134	31.44	1.52	[illegible]	[illegible]
8	7.9913	691.72	420.37	809.54	601.467	547.224	23.805	17.088	.7049	31.30	1.26	[illegible]	[illegible]
9	8.0328	686.70	415.21	802.46	601.604	548.387	23.810	17.197	.6981	31.16	[illegible]	[illegible]	[illegible]
10	8.0730	685.21	412.21	793.64	602.511	549.891	23.867	17.291	.6946	31.03	[illegible]	[illegible]	[illegible]
11	8.1145	684.24	410.11	797.73	604.021	551.355	23.923	17.371	.6921	30.94	[illegible]	[illegible]	[illegible]
12	8.1556	681.70	407.33	794.41	604.870	552.644	23.940	17.448	.6884	30.59	[illegible]	[illegible]	[illegible]
13	8.1933	676.68	404.98	788.54	605.153	553.708	23.899	17.498	.6827	30.30	[illegible]	[illegible]	[illegible]
14	8.2437	671.49	402.94	783.44	605.443	554.652	23.857	17.344	.6777	30.93	[illegible]	[illegible]	[illegible]
15	8.2863	663.32	402.73	781.14	606.686	556.195	23.841	17.376	.6747	31.04	[illegible]	[illegible]	[illegible]
16	8.3317	665.57	404.54	781.99	608.892	558.347	23.844	17.592	.6730	31.14	[illegible]	[illegible]	[illegible]
17	8.3774	668.89	403.92	783.66	611.129	560.321	23.845	17.385	.6744	31.51	.52	[illegible]	[illegible]
18	8.4239	667.42	417.72	787.37	612.350	561.062	23.845	17.542	.6772	32.04	.18	[illegible]	[illegible]
19	8.4713	665.35	429.67	794.83	613.653	561.390	23.845	17.448	.6834	32.74	-.33	[illegible]	[illegible]
20	8.5213	671.68	449.37	806.42	615.080	561.283	23.843	17.293	.6934	33.57	-1.06	7.765	[illegible]
21	8.5730	678.62	455.02	821.58	616.680	560.842	23.837	17.094	.7067	34.56	-2.03	5.947	[illegible]

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.647	32.308	.843	.0205	0.0	.7833	890.90	23.814	601.539	[illegible]	[illegible]	[illegible]	[illegible]
2	31.748	-23.332	32.597	.855	.0204	0.0	.7712	877.99	23.820	601.540	[illegible]	[illegible]	[illegible]	[illegible]
3	31.463	-21.328	32.323	.866	.0206	0.0	.7583	864.83	23.826	601.541	[illegible]	[illegible]	[illegible]	[illegible]
4	31.154	-18.020	32.036	.882	.0211	0.0	.7458	851.93	23.828	601.337	[illegible]	[illegible]	[illegible]	[illegible]
5	30.871	-16.638	31.772	.901	.0222	0.0	.7339	839.73	23.829	601.530	[illegible]	[illegible]	[illegible]	[illegible]
6	30.656	-14.378	31.579	.923	.0245	0.0	.7229	828.30	23.817	601.513	[illegible]	[illegible]	[illegible]	[illegible]
7	30.491	-12.236	31.436	.945	.0273	0.0	.7134	818.34	23.811	601.499	[illegible]	[illegible]	[illegible]	[illegible]
8	30.333	-10.134	31.300	.967	.0301	0.0	.7049	809.54	23.805	601.467	[illegible]	[illegible]	[illegible]	[illegible]
9	30.172	-7.930	31.159	.987	.0325	0.0	.6981	802.46	23.810	601.604	[illegible]	[illegible]	[illegible]	[illegible]
10	30.026	-5.813	31.030	1.005	.0363	0.0	.6946	793.64	23.867	602.511	[illegible]	[illegible]	[illegible]	[illegible]
11	29.916	-3.604	30.937	1.023	.0339	0.0	.6921	797.73	23.923	604.021	[illegible]	[illegible]	[illegible]	[illegible]
12	29.858	-1.331	30.594	1.036	.0420	0.0	.6884	794.41	23.940	604.870	[illegible]	[illegible]	[illegible]	[illegible]
13	29.850	.434	30.303	1.047	.0411	0.0	.6827	788.54	23.899	605.155	[illegible]	[illegible]	[illegible]	[illegible]
14	29.880	2.774	30.932	1.053	.0403	0.0	.6777	783.44	23.857	605.443	[illegible]	[illegible]	[illegible]	[illegible]
15	29.981	5.429	31.035	1.055	.0398	0.0	.6747	781.14	23.841	606.686	[illegible]	[illegible]	[illegible]	[illegible]
16	30.144	8.531	31.136	1.053	.0413	0.0	.6730	781.59	23.844	608.892	[illegible]	[illegible]	[illegible]	[illegible]
17	30.462	12.032	31.518	1.051	.0431	0.0	.6744	783.66	23.845	611.129	[illegible]	[illegible]	[illegible]	[illegible]
18	30.909	15.832	32.041	1.052	.0450	0.0	.6772	787.37	23.845	612.350	[illegible]	[illegible]	[illegible]	[illegible]
19	31.503	20.008	32.741	1.057	.0471	0.0	.6834	794.83	23.845	613.653	[illegible]	[illegible]	[illegible]	[illegible]
20	32.389	24.339	33.573	1.066	.0500	0.0	.6934	806.42	23.843	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	33.478	28.225	34.557	1.079	.0542	0.0	.7067	821.58	23.837	[illegible]	1.622	[illegible]	[illegible]	[illegible]

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.623 ISEN. EFF.= .879 [illegible] EFF.= .887 DELTA T ON T = .108

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	706.61	223.94	741.24	601.539	[illegible]	23.681	17.974	.6403	17.58	-2.37	-5.196	[illegible]
2	7.7574	696.15	219.33	730.03	601.540	[illegible]	23.677	18.126	.6299	17.54	-2.38	[illegible]	[illegible]
3	7.7926	686.10	215.96	719.47	601.541	558.706	23.672	18.268	.6201	17.52	-2.44	[illegible]	[illegible]
4	7.8230	676.49	213.54	709.40	601.537	559.894	23.665	18.398	.6108	17.52	-2.49	[illegible]	[illegible]
5	7.8656	667.49	210.69	699.92	601.530	560.993	23.654	18.519	.6020	17.52	-2.49	[illegible]	[illegible]
6	7.9034	659.47	207.40	690.37	601.519	562.081	23.628	18.625	.5932	17.49	-2.45	[illegible]	[illegible]
7	7.9424	651.63	204.25	681.34	601.495	563.015	23.603	18.717	.5855	17.43	-2.35	[illegible]	[illegible]
8	7.9824	643.75	201.30	674.51	601.467	563.921	23.573	18.793	.5787	17.37	-2.20	-12.422	[illegible]
9	8.0235	639.28	199.56	669.04	601.604	564.567	23.563	18.454	.5736	17.35	-2.00	[illegible]	[illegible]
10	8.0656	637.23	198.50	667.73	602.811	565.921	23.592	18.383	.5718	17.38	-1.77	[illegible]	[illegible]
11	8.1035	636.55	198.85	667.21	604.021	567.190	23.621	18.962	.5708	17.43	-1.50	[illegible]	[illegible]
12	8.1521	634.89	198.72	665.56	604.870	568.223	23.624	18.971	.5688	17.46	-1.22	[illegible]	[illegible]
13	8.1957	631.70	198.92	662.19	605.155	568.879	23.534	18.399	.5656	17.48	-.92	-21.603	[illegible]
14	8.2421	629.33	198.34	659.42	605.443	569.470	23.562	19.807	.5630	17.58	-.65	[illegible]	[illegible]
15	8.2934	629.15	198.34	655.31	606.686	570.781	23.532	19.013	.5618	17.59	-.32	[illegible]	[illegible]
16	8.3354	628.59	199.55	653.69	608.892	572.894	23.545	19.011	.5613	17.63	-.03	[illegible]	[illegible]
17	8.3351	623.66	202.03	661.31	611.129	574.958	23.537	19.000	.5613	17.79	.25	[illegible]	[illegible]
18	8.4313	630.31	205.42	663.23	612.350	575.970	23.527	18.926	.5637	18.04	.51	[illegible]	[illegible]
19	8.4901	632.97	210.31	666.90	613.653	576.870	23.523	18.935	.5657	18.38	.71	[illegible]	[illegible]
20	8.5295	636.35	215.47	672.18	615.080	577.714	23.518	18.873	.5698	18.79	.84	-313.323	.0079
21	8.5733	641.19	223.36	679.08	616.680	578.545	23.509	18.789	.5752	19.23	.88	76.314	.0074

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.414	17.545	1.351	.0403	0.0	.6403	741.24	23.681	601.539	1.611	.160	[illegible]	[illegible]
2	16.182	-8.915	17.530	1.354	.0411	0.0	.6299	730.04	23.677	601.540	1.611	[illegible]	[illegible]	[illegible]
3	16.154	-8.347	17.513	1.363	.0421	0.0	.6201	719.47	23.672	601.541	1.611	[illegible]	[illegible]	[illegible]
4	16.136	-7.701	17.519	1.383	.0436	0.0	.6108	709.40	23.665	601.537	1.610	[illegible]	[illegible]	[illegible]
5	16.108	-6.963	17.519	1.411	.0457	0.0	.6020	699.92	23.654	601.530	1.610	[illegible]	[illegible]	[illegible]
6	16.042	-6.118	17.438	1.445	.0501	0.0	.5932	690.37	23.628	601.519	1.608	[illegible]	[illegible]	[illegible]
7	15.944	-5.134	17.428	1.484	.0553	0.0	.5855	681.96	23.603	601.495	1.606	[illegible]	[illegible]	[illegible]
8	15.947	-4.201	17.359	1.523	.0609	0.0	.5787	674.51	23.576	601.467	[illegible]	[illegible]	[illegible]	[illegible]
9	15.795	-3.219	17.354	1.553	.0659	0.0	.5736	669.04	23.563	601.604	[illegible]	[illegible]	[illegible]	[illegible]
10	15.790	-2.299	17.394	1.593	.0726	0.0	.5718	667.73	23.592	602.811	[illegible]	[illegible]	[illegible]	[illegible]
11	15.806	-1.428	17.430	1.624	.0799	0.0	.5708	667.21	23.621	604.021	[illegible]	[illegible]	[illegible]	[illegible]
12	15.813	-.771	17.463	1.650	.0833	0.0	.5638	665.56	23.624	604.870	[illegible]	[illegible]	[illegible]	[illegible]
13	15.812	-.132	17.482	1.670	.0820	0.0	.5656	662.19	23.534	605.155	[illegible]	[illegible]	[illegible]	[illegible]
14	15.822	.431	17.535	1.663	.0800	0.0	.5630	659.42	23.534	605.443	[illegible]	[illegible]	[illegible]	[illegible]
15	15.862	1.138	17.548	1.686	.0737	0.0	.5618	658.81	23.532	606.686	[illegible]	[illegible]	[illegible]	[illegible]
16	15.951	2.101	17.634	1.684	.0831	0.0	.5615	653.69	23.545	608.892	1.602	[illegible]	[illegible]	[illegible]
17	16.111	3.133	17.791	1.680	.0859	0.0	.5619	661.31	23.537	611.129	1.602	[illegible]	[illegible]	[illegible]
18	16.362	4.263	18.043	1.681	.0909	0.0	.5630	663.23	23.527	612.350	1.601	[illegible]	[illegible]	[illegible]
19	16.697	5.523	18.332	1.666	.0949	0.0	.5657	666.90	23.523	613.653	1.601	[illegible]	[illegible]	[illegible]
20	17.058	6.935	18.750	1.698	.1001	0.0	.5698	672.18	23.518	615.080	1.600	[illegible]	[illegible]	[illegible]
21	17.518	8.942	19.229	1.713	.1060	0.0	.5752	679.08	23.509	616.680	1.600	[illegible]	[illegible]	[illegible]

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.605 ISEN. EFF.= .857 POLY. EFF.= .867 DELTA T ON T = .166

STATION 14 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------ MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	387.72	63.93	591.13	601.539	572.627	23.547	19.809	.5033	6.18	-4.29	18.241	[illegible]
2	7.7132	385.38	62.24	590.07	601.540	572.733	23.531	19.809	.5024	6.05	[illegible]	[illegible]	[illegible]
3	7.7531	383.30	60.94	588.36	601.541	572.845	23.514	19.808	.5013	5.96	[illegible]	[illegible]	[illegible]
4	7.7855	384.53	59.84	587.74	601.537	572.959	23.495	19.807	.5003	5.84	[illegible]	[illegible]	[illegible]
5	7.8293	383.41	53.91	586.38	601.530	573.084	23.473	19.805	.4990	5.77	[illegible]	[illegible]	[illegible]
6	7.8736	380.30	57.93	583.39	601.519	573.364	23.431	19.803	.4964	5.70	[illegible]	[illegible]	[illegible]
7	7.9123	377.99	57.05	580.48	601.497	573.627	23.387	19.800	.4937	5.66	[illegible]	[illegible]	[illegible]
8	7.9562	374.34	55.24	577.23	601.497	573.896	23.341	19.797	.4910	5.59	[illegible]	[illegible]	[illegible]
9	8.0034	372.70	55.07	575.40	601.604	574.215	23.313	19.794	.4892	5.55	[illegible]	[illegible]	[illegible]
10	8.0434	373.93	55.47	576.93	602.811	575.315	23.313	19.790	.4897	5.52	[illegible]	[illegible]	[illegible]
11	8.0912	375.02	55.33	577.66	604.021	576.416	23.315	19.785	.4902	5.50	[illegible]	[illegible]	[illegible]
12	8.1377	375.16	55.31	577.32	604.870	577.255	23.306	19.780	.4900	5.49	[illegible]	[illegible]	[illegible]
13	8.1850	374.63	55.24	577.27	605.155	577.390	23.290	19.774	.4894	5.49	[illegible]	[illegible]	[illegible]
14	8.2330	374.20	55.25	576.86	605.463	577.918	23.273	19.768	.4863	5.50	[illegible]	[illegible]	[illegible]
15	8.2818	374.92	55.65	577.53	606.686	579.083	23.261	19.761	.4898	5.51	[illegible]	[illegible]	[illegible]
16	8.3313	375.46	55.81	578.16	608.892	581.246	23.254	19.755	.4850	5.56	[illegible]	[illegible]	[illegible]
17	8.3816	375.53	55.40	573.23	611.129	583.446	23.237	19.747	.4881	5.59	[illegible]	[illegible]	[illegible]
18	8.4323	375.47	57.30	573.31	612.350	584.694	23.213	19.741	.4873	5.63	[illegible]	[illegible]	[illegible]
19	8.4843	375.01	58.02	578.61	613.693	585.970	23.207	19.735	.4870	5.83	[illegible]	[illegible]	[illegible]
20	8.5360	375.02	61.01	574.83	615.080	587.375	23.193	19.729	.4867	6.05	[illegible]	-7[illegible]	[illegible]
21	8.5900	375.43	63.50	576.98	616.640	588.965	23.161	19.724	.4861	6.33	1.06	-610.607	[illegible]

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.968	-1.034	6.183	2.218	.0601	0.0	.5033	591.13	23.547	601.539	1.602	.160	[illegible]	[illegible]
2	[illegible]	-.995	6.035	2.223	.0622	0.0	.5024	590.03	23.531	601.540	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	-.921	5.939	2.240	.0646	0.0	.5013	588.96	23.514	601.541	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	-.836	5.344	2.272	.0670	0.0	.5003	587.74	23.496	601.537	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	-.743	2.756	2.316	.0701	0.0	.4990	586.38	23.473	601.530	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	-.661	5.639	2.389	.0767	0.0	.4964	583.38	23.431	601.519	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	-.584	5.541	2.428	.0844	0.0	.4937	580.40	23.387	601.497	[illegible]	[illegible]	[illegible]	[illegible]
8	3.100	-.510	5.531	2.491	.0925	0.0	.4910	577.29	23.341	601.497	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	-.438	[illegible]	2.554	.0998	0.0	.4892	575.40	23.313	601.604	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	2.614	.1008	0.0	.4897	576.53	23.313	602.811	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	2.666	[illegible]	0.0	.4902	577.66	23.315	604.021	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	2.711	[illegible]	0.0	.4900	577.02	23.306	604.870	[illegible]	[illegible]	[illegible]	[illegible]
13	2.750	-.138	5.491	2.741	.1226	0.0	.4894	577.27	23.290	605.155	[illegible]	[illegible]	[illegible]	[illegible]
14	2.746	-.141	5.498	2.752	.1135	0.0	.4889	576.86	23.273	605.463	[illegible]	[illegible]	[illegible]	[illegible]
15	2.765	-.157	5.218	2.759	.1199	0.0	.4898	577.59	23.261	606.686	[illegible]	[illegible]	[illegible]	[illegible]
16	2.813	-.250	5.340	2.727	.1238	0.0	.4866	578.16	23.254	608.892	[illegible]	.176	[illegible]	[illegible]
17	2.885	-.423	5.594	2.718	.1295	0.0	.4881	578.59	23.237	611.129	[illegible]	.176	[illegible]	[illegible]
18	2.975	-.632	5.637	2.708	.1357	0.0	.4873	578.31	23.218	612.350	[illegible]	[illegible]	[illegible]	[illegible]
19	3.109	-.834	5.934	2.725	.1419	0.0	.4870	578.61	23.207	613.693	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	-.878	6.058	2.762	.1497	0.0	.4867	578.85	23.195	615.080	1.579	[illegible]	[illegible]	[illegible]
21	3.500	-1.033	6.326	2.818	.1594	0.0	.4861	578.98	23.160	616.680	1.577	.169	.7345	[illegible]

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.587 ISEN. EFF.= .836 POLY. EFF.= .846 DELTA T ON T = .188

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	563.11	0.00	563.11	601.539	575.307	23.414	20.322	.4783	0.00	-1.66	10.624	[illegible]
2	7.6733	563.07	0.00	563.07	601.540	575.313	23.397	19.359	.4783	0.00	-1.65	11.143	[illegible]
3	7.7205	562.93	0.00	562.93	601.541	575.326	23.359	19.375	.4782	0.00	-1.61	11.578	[illegible]
4	7.7629	562.58	0.00	562.58	601.337	575.345	23.327	19.353	.4773	0.00	-1.58	12.873	[illegible]
5	7.8063	562.22	0.00	562.22	601.230	575.381	23.295	19.331	.4775	0.00	-1.53	12.715	[illegible]
6	7.8470	559.37	0.00	559.37	601.519	575.635	23.211	19.310	.4750	0.00	-1.47	13.432	[illegible]
7	7.8918	556.25	0.00	556.25	601.495	575.898	23.169	19.390	.4723	0.00	-1.40	14.481	[illegible]
8	7.9371	552.88	0.00	552.88	601.467	576.180	23.104	19.871	.4693	0.00	-1.31	15.776	[illegible]
9	7.9834	550.41	0.00	550.41	601.604	576.506	23.037	19.854	.4674	0.00	-1.20	17.806	[illegible]
10	8.0303	551.02	0.00	551.02	602.311	577.696	23.034	19.838	.4671	0.00	-1.08	13.960	[illegible]
11	8.0733	551.02	0.00	551.02	604.021	578.906	23.011	19.825	.4665	0.00	-.95	23.470	[illegible]
12	8.1272	550.77	0.00	550.77	604.870	579.788	22.993	19.813	.4660	0.00	-.80	29.929	[illegible]
13	8.1757	551.51	0.00	551.51	605.153	579.997	22.997	19.804	.4665	0.00	-.65	37.366	[illegible]
14	8.2297	552.04	0.00	552.04	605.443	580.237	22.984	19.797	.4669	0.00	-.51	53.493	[illegible]
15	8.2773	552.80	0.00	552.80	606.686	581.412	22.991	19.792	.4671	0.00	-.36	87.498	[illegible]
16	8.3238	552.00	0.00	552.00	606.892	583.693	22.933	19.790	.4655	0.00	-.22	233.384	[illegible]
17	8.3814	550.77	0.00	550.77	611.129	586.045	22.925	19.789	.4636	0.00	-.06	-343.772	[illegible]
18	8.4341	549.81	0.00	549.51	612.350	587.455	22.839	19.791	.4614	0.00	.09	-99.178	[illegible]
19	8.4931	547.67	0.00	547.67	613.653	588.853	22.831	19.796	.4593	0.00	.24	-58.881	[illegible]
20	8.5441	546.48	0.00	545.45	615.080	590.389	22.806	19.802	.4583	0.00	.38	-42.535	[illegible]
21	8.6030	545.14	0.00	545.14	615.660	592.112	22.891	19.811	.4563	0.00	.52	-31.308	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.0739	0.0	.4783	563.11	23.414	601.539	1.593	[illegible]	[illegible]	[illegible]
2	-7.396	.020	0.000	7.393	.0832	0.0	.4783	563.07	23.393	601.540	1.591	[illegible]	[illegible]	[illegible]
3	-7.363	.019	0.000	7.363	.0865	0.0	.4782	562.93	23.356	601.541	1.589	[illegible]	[illegible]	[illegible]
4	-7.732	.019	0.000	7.732	.0903	0.0	.4779	562.56	23.327	601.337	1.587	[illegible]	[illegible]	[illegible]
5	-7.902	.016	0.000	7.902	.0947	0.0	.4775	562.22	23.295	601.330	1.585	[illegible]	[illegible]	[illegible]
6	-8.069	.013	0.000	8.069	.1036	0.0	.4750	559.37	23.211	601.519	1.581	[illegible]	[illegible]	[illegible]
7	-8.235	.011	0.000	8.235	.1137	0.0	.4723	556.26	23.169	601.495	1.577	[illegible]	[illegible]	[illegible]
8	-8.396	.010	0.000	8.396	.1243	0.0	.4693	552.88	23.104	601.467	1.572	[illegible]	[illegible]	[illegible]
9	-8.548	.009	0.000	8.548	.1339	0.0	.4674	550.41	23.037	601.604	1.569	[illegible]	[illegible]	[illegible]
10	-8.639	.007	0.000	8.639	.1471	0.0	.4671	551.02	23.034	602.311	1.567	[illegible]	[illegible]	[illegible]
11	-8.807	.003	0.000	8.807	.1644	0.0	.4666	551.02	23.011	604.021	1.566	[illegible]	[illegible]	[illegible]
12	-8.909	.003	0.000	8.909	.1678	0.0	.4660	550.77	22.990	604.870	1.564	[illegible]	[illegible]	[illegible]
13	-8.990	.001	0.000	8.990	.1635	0.0	.4666	551.51	22.987	605.155	1.564	[illegible]	[illegible]	[illegible]
14	-9.043	-.001	0.000	9.043	.1592	0.0	.4669	552.04	22.984	605.443	1.564	[illegible]	[illegible]	[illegible]
15	-9.002	-.004	0.000	9.002	.1587	0.0	.4671	552.40	22.981	606.686	1.564	[illegible]	[illegible]	[illegible]
16	-9.039	-.007	0.000	9.039	.1655	0.0	.4655	552.00	22.959	606.892	1.562	.174	[illegible]	[illegible]
17	-9.060	-.012	0.000	9.060	.1735	0.0	.4636	550.77	22.926	611.129	1.560	.178	[illegible]	[illegible]
18	-9.084	-.018	0.000	9.084	.1921	0.0	.4614	549.51	22.838	612.350	1.558	[illegible]	[illegible]	[illegible]
19	-9.125	-.024	0.000	9.125	.1903	0.0	.4599	547.67	22.861	613.653	1.557	[illegible]	[illegible]	[illegible]
20	-9.169	-.031	0.000	9.169	.2002	0.0	.4583	546.48	22.806	615.080	1.556	[illegible]	[illegible]	[illegible]
21	-9.213	-.035	0.000	9.213	.2120	0.0	.4565	545.14	22.851	616.388	1.555	[illegible]	[illegible]	[illegible]

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.564 ISEN. EFF.= .814 POLY. EFF.= .825 DELTA T ON T = .168

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	580.18	0.00	580.18	601.539	573.691	23.414	19.826	.4935	0.00	0.00	0.000	[illegible]
2	7.6731	578.13	0.00	578.13	601.540	573.890	23.385	19.826	.4917	0.00	-.03	[illegible]	[illegible]
3	7.7132	576.04	0.00	576.04	601.541	574.090	23.355	19.825	.4898	0.00	-.06	566.037	[illegible]
4	7.7601	573.90	0.00	573.90	601.537	574.290	23.327	19.825	.4879	0.00	-.08	[illegible]	[illegible]
5	7.8020	571.61	0.00	571.61	601.530	574.500	23.293	19.824	.4853	0.00	-.10	329.663	[illegible]
6	7.8448	567.04	0.00	567.04	601.519	574.920	23.233	19.823	.4819	0.00	-.12	[illegible]	[illegible]
7	7.8838	562.31	0.00	562.31	601.495	575.333	23.163	19.822	.4776	0.00	-.13	262.376	[illegible]
8	7.9339	557.39	0.00	557.39	601.467	575.765	23.104	19.821	.4733	0.00	-.14	248.672	[illegible]
9	7.9801	553.90	0.00	553.90	601.604	576.224	23.057	19.820	.4701	0.00	-.14	243.218	[illegible]
10	8.0273	552.81	0.00	552.81	602.811	577.532	23.034	19.819	.4687	0.00	-.14	244.834	.0923
11	8.0753	551.68	0.00	551.68	604.021	578.846	23.011	19.817	.4672	0.00	-.14	253.334	.0921
12	8.1242	550.47	0.00	550.47	604.870	579.806	22.990	19.816	.4658	0.00	-.13	269.391	.0919
13	8.1739	550.47	0.00	550.47	605.155	580.032	22.937	19.815	.4657	0.00	-.12	294.479	.0919
14	8.2243	550.45	0.00	550.45	605.443	580.382	22.984	19.814	.4655	0.00	-.11	331.694	.0918
15	8.2754	550.85	0.00	550.85	606.686	581.590	22.981	19.813	.4654	0.00	-.09	386.875	.0916
16	8.3273	549.88	0.00	549.88	608.892	583.857	22.955	19.813	.4637	0.00	-.08	470.162	.0913
17	8.3801	548.67	0.00	548.67	611.129	586.236	22.925	19.812	.4617	0.00	-.06	605.795	.0909
18	8.4339	546.33	0.00	546.33	612.350	587.615	22.898	19.812	.4597	0.00	-.04	849.265	.0907
19	8.4835	546.22	0.00	546.22	613.653	588.984	22.881	19.811	.4586	0.00	-.03	1371.086	.0905
20	8.5438	545.66	0.00	545.66	615.080	590.453	22.865	19.811	.4575	0.00	-.01	3035.611	.0903
21	8.6000	545.14	0.00	545.14	616.680	592.112	22.851	19.811	.4565	0.00	0.00	0.000	.0900

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	581.44	0.00	581.44	601.539	573.570	23.414	19.811	.4946	0.00	0.00	0.000	.0929
2	7.6731	579.38	0.00	579.38	601.540	573.770	23.385	19.811	.4928	0.00	-.00	0.000	.0929
3	7.7191	577.26	0.00	577.26	601.541	573.973	23.356	19.811	.4909	0.00	-.00	0.000	.0929
4	7.7630	575.08	0.00	575.08	601.537	574.178	23.327	19.811	.4890	0.00	-.00	0.000	.0928
5	7.8018	572.73	0.00	572.73	601.530	574.394	23.295	19.811	.4863	0.00	-.00	0.000	.0928
6	7.8447	568.10	0.00	568.10	601.519	574.821	23.233	19.811	.4828	0.00	-.01	0.000	.0927
7	7.8886	563.28	0.00	563.28	601.495	575.247	23.163	19.811	.4785	0.00	-.01	0.000	.0926
8	7.9337	558.28	0.00	558.28	601.467	575.683	23.104	19.811	.4741	0.00	-.01	0.000	.0926
9	7.9799	554.68	0.00	554.68	601.604	576.152	23.057	19.811	.4708	0.00	-.01	0.000	.0925
10	8.0270	553.49	0.00	553.49	602.811	577.470	23.034	19.811	.4693	0.00	-.01	0.000	.0923
11	8.0751	552.26	0.00	552.26	604.021	578.794	23.011	19.811	.4677	0.00	-.01	0.000	.0921
12	8.1240	550.95	0.00	550.95	604.870	579.763	22.990	19.811	.4662	0.00	-.01	0.000	.0919
13	8.1737	550.84	0.00	550.34	605.155	580.058	22.987	19.811	.4660	0.00	-.01	0.000	.0919
14	8.2241	550.74	0.00	550.74	605.443	580.356	22.984	19.811	.4659	0.00	-.01	0.000	.0918
15	8.2752	551.05	0.00	551.05	606.686	581.570	22.981	19.811	.4656	0.00	-.01	0.000	.0916
16	8.3271	550.02	0.00	550.02	608.892	583.874	22.955	19.811	.4638	0.00	-.01	0.000	.0913
17	8.3800	548.76	0.00	548.76	611.129	586.228	22.926	19.811	.4618	0.00	-.01	0.000	.0909
18	8.4337	546.98	0.00	546.98	612.350	587.611	22.898	19.811	.4598	0.00	-.00	0.000	.0907
19	8.4894	545.24	0.00	546.24	613.653	588.982	22.881	19.811	.4586	0.00	-.00	0.000	.0905
20	8.5438	545.56	0.00	545.66	615.080	590.463	22.865	19.811	.4576	0.00	-.00	0.000	.0903
21	8.6000	545.14	0.00	545.14	616.680	592.112	22.851	19.811	.4565	0.00	0.00	0.000	.0900

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	.6884	9.383	6.434	.1204	.4242	.4349	.5468	.7403	.7693	-60.937	-12.647	6.078	10.991
2	6.8647	7.5937	.6995	9.146	6.656	.1151	.4427	.4523	.5527	.7223	.7605	-61.313	-13.539	6.236	10.626
3	6.9785	7.6397	.7105	8.911	6.805	.1102	.4578	.4662	.5545	.7081	.7516	-61.675	-14.428	6.372	10.112
4	7.0912	7.6849	.7217	8.695	6.930	.1056	.4700	.4775	.5535	.6961	.7425	-62.010	-15.381	6.418	9.360
5	7.2031	7.7321	.7325	9.511	7.099	.1013	.4801	.4865	.5503	.6861	.7334	-62.309	-16.188	6.384	8.452
6	7.3142	7.7803	.7435	9.348	7.058	.0970	.4881	.4337	.5457	.6780	.7243	-62.587	-17.067	5.996	7.658
7	7.4243	7.8295	.7542	9.197	7.13	.0918	.4935	.4386	.5398	.6720	.7150	-62.859	-17.893	5.497	7.069
8	7.5341	7.8794	.7643	9.053	7.245	.0869	.4982	.5021	.5330	.6673	.7057	-63.135	-18.639	4.811	6.716
9	7.6433	7.9302	.7751	7.917	7.323	.0839	.5028	.5060	.5254	.6625	.6979	-63.418	-19.386	3.941	6.664
10	7.7522	7.9819	.7855	7.738	6.913	.0921	.5127	.5182	.5173	.6517	.6989	-63.714	-19.985	2.910	6.925
11	7.8609	8.0348	.7955	7.667	8.501	.1000	.5272	.5291	.5087	.6413	.6937	-64.026	-20.446	1.763	7.377
12	7.9693	8.0885	.8059	7.551	8.994	.1078	.5371	.5383	.4997	.6325	.6972	-64.358	-20.933	.538	8.315
13	8.0791	8.1442	.8157	7.439	7.340	.1158	.5450	.5457	.4902	.5240	.6901	-64.713	-21.372	-.810	9.360
14	8.1831	8.2012	.8255	7.332	7.673	.1235	.5518	.5520	.4802	.5165	.6828	-65.093	-21.761	-2.287	10.530
15	8.2899	8.2599	.8353	7.225	7.330	.1417	.5671	.5567	.4730	.5017	.6820	-65.501	-22.080	-3.859	11.667
16	8.4120	8.3212	.8450	7.119	8.115	.1695	.5910	.5901	.4598	.3794	.6896	-65.938	-22.314	-5.336	12.744
17	8.5255	8.3990	.8547	7.016	8.434	.1950	.6143	.6129	.4438	.5583	.6359	-66.399	-22.435	-6.422	13.552
18	8.6400	8.4528	.8644	5.922	9.226	.2078	.6241	.6223	.4400	.5481	.6340	-66.874	-22.400	[illegible]	[illegible]
19	8.7502	8.5223	.8743	5.844	10.220	.2199	.6343	.6320	.4303	.5374	.6922	-67.352	-22.207	-7.776	[illegible]
20	8.8775	8.5945	.8843	6.733	11.443	.2327	.6456	.6430	.4212	.5255	.6309	-67.832	-21.856	-8.572	13.574
21	9.0000	8.6099	.8943	6.732	12.952	.2465	.6594	.6364	.4134	.5112	.6902	-68.316	-21.371	-9.687	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.6400	.7055	.693	7.239	.0799	.4615	.4314	.4108	.6967	0.0000	48.817	-7.239	-39.941	[illegible]
2	7.6772	7.6739	.7151	-.014	7.336	.0832	.4770	.4770	.4284	.6850	0.0000	47.993	-7.396	[illegible]	[illegible]
3	7.7309	7.7205	.7271	-.563	7.553	.0856	.4908	.4903	.4377	.6701	0.0000	47.355	-7.563	[illegible]	[illegible]
4	7.7810	7.7620	.7353	-1.033	7.732	.0903	.5019	.5021	.4435	.6630	0.0000	46.729	-7.732	[illegible]	[illegible]
5	7.8255	7.8043	.7409	-1.377	7.912	.0947	.5106	.5108	.4451	.6633	0.0000	46.315	-7.902	[illegible]	[illegible]
6	7.8744	7.8470	.7444	-1.634	8.059	.1036	.5201	.5204	.4464	.6577	0.0000	45.966	-8.069	[illegible]	[illegible]
7	7.9132	7.8913	.7450	-1.752	8.235	.1137	.5284	.5287	.4445	.6523	0.0030	45.644	-8.235	[illegible]	[illegible]
8	7.9633	7.9371	.7470	-1.842	8.375	.1243	.5358	.5361	.4414	.6476	0.0000	45.348	-8.396	[illegible]	[illegible]
9	8.0069	7.9934	.7480	-1.603	8.540	.1335	.5410	.5413	.4369	.6449	0.0000	45.066	-8.558	[illegible]	[illegible]
10	8.0505	8.0302	.7502	-1.247	8.589	.1471	.5467	.5470	.4279	.6427	0.0000	44.838	[illegible]	[illegible]	[illegible]
11	8.0945	8.0785	.7515	-.800	8.807	.1604	.5516	.5518	.4197	.6408	0.0000	44.688	-8.887	[illegible]	[illegible]
12	8.1384	8.1272	.7533	-.436	8.909	.1678	.5535	.5536	.4119	.6412	0.0000	44.622	-8.989	[illegible]	[illegible]
13	8.1830	8.1757	.7445	-.234	8.930	.1635	.5495	.5496	.4093	.6464	0.0000	44.675	-8.990	[illegible]	[illegible]
14	8.2282	8.2297	.7381	-.037	9.043	.1532	.5445	.5445	.4062	.6513	0.0000	44.802	-9.043	[illegible]	[illegible]
15	8.2751	8.2777	.7324	.635	9.032	.1567	.5412	.5412	.4006	.6566	0.0000	44.949	-9.062	[illegible]	[illegible]
16	8.3235	8.3290	.7273	1.595	9.039	.1695	.5415	.5414	.3921	.6590	0.0000	45.116	-9.059	[illegible]	[illegible]
17	8.3744	8.3814	.7201	3.133	9.060	.1735	.5401	.5400	.3813	.6620	0.0000	45.478	-9.060	[illegible]	[illegible]
18	8.4282	8.4349	.7110	3.526	9.094	.1821	.5340	.5339	.3683	.6687	0.0000	46.235	-9.094	[illegible]	[illegible]
19	8.4857	8.4931	.6993	3.633	9.125	.1903	.5235	.5232	.3511	.6748	0.0000	47.428	-9.125	[illegible]	[illegible]
20	8.5489	8.5441	.6947	4.172	9.159	.2012	.5094	.5095	.3297	.6850	0.0000	48.944	-9.159	[illegible]	[illegible]
21	8.6193	8.6000	.6931	4.652	9.213	.2120	.4924	.4927	.3019	.6985	0.0000	50.814	-9.213	[illegible]	[illegible]

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.1	0.0	0.3	0.3	1.0	2.0	3.1	4.1	5.1	4.9	3.0	5.0	7.0	8.0	12.3	13.6	13.6
DIST FACTOR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	3.0	0.0	0.3	0.3	1.0	2.3	3.2	4.2	5.2	5.8	3.0	5.0	7.0	8.0	12.3	13.6	13.6

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 212051715560

FLOW = 15.81 SPEED = 12239.2 PRESSURE RATIO = 1.569 ISENTROPIC EFFY = .9138 POLYTROPIC EFFY = .6252 DEL T/T = .1605

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW SAVE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	----ROTOR---- ISEN EFFY	----STAGE---- PRESSURE RATIO	----STAGE---- ISEN EFFY	FLOW/ (CHOKE FLOW)
1	212051715560	CONVERGED AFTER 25 PASSES	15.886	12239.2	1.640	.988	1.569	.914	.30347

4. TEST POINT 212070815970 (70%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0390	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	20.93	0.000	.0747
2	6.2238	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	19.71	0.000	.0747
3	6.3836	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	18.47	0.000	.0747
4	6.5392	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	17.23	0.000	.0747
5	6.6937	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	15.98	0.000	.0747
6	6.8471	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	14.74	0.000	.0747
7	6.9997	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	13.50	0.000	.0747
8	7.1514	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	12.26	0.000	.0747
9	7.3023	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	11.04	0.000	.0747
10	7.4529	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	9.84	0.000	.0747
11	7.6023	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.67	0.000	.0747
12	7.7524	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.52	0.000	.0747
13	7.9016	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	6.41	0.000	.0747
14	8.0505	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	5.35	0.000	.0747
15	8.1993	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	4.34	0.000	.0747
16	8.3473	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	3.40	0.000	.0747
17	8.4963	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	2.53	0.000	.0747
18	8.6447	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	1.74	0.000	.0747
19	8.7931	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	1.04	0.000	.0747
20	8.9415	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	.46	0.000	.0747
21	9.0900	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	255.93	0.00	255.93	518.688	513.240	14.695	14.163	.2303	0.00	20.83	-205.780	.0744
2	6.5134	257.21	0.00	257.21	518.688	513.185	14.695	14.158	.2315	0.00	19.53	-119.388	.0744
3	6.6533	258.33	0.00	258.33	518.688	513.137	14.695	14.153	.2325	0.00	18.23	-87.027	.0744
4	6.7973	259.31	0.00	259.31	518.688	513.095	14.695	14.149	.2334	0.00	16.94	-71.869	.0743
5	6.9228	260.13	0.00	260.13	518.688	513.059	14.695	14.146	.2341	0.00	15.65	-61.787	.0743
6	7.0579	260.84	0.00	260.84	518.688	513.029	14.695	14.143	.2348	0.00	14.36	-54.367	.0743
7	7.1917	261.37	0.00	261.37	518.688	513.005	14.695	14.140	.2352	0.00	13.07	[illegible]	.0743
8	7.3233	261.74	0.00	261.74	518.688	512.989	14.695	14.139	.2356	0.00	11.80	[illegible]	.0743
9	7.4553	261.93	0.00	261.93	518.688	512.981	14.695	14.138	.2358	0.00	10.53	[illegible]	.0743
10	7.5917	261.93	0.00	261.93	518.688	512.981	14.695	14.138	.2358	0.00	9.28	[illegible]	.0743
11	7.7243	261.71	0.00	261.71	518.688	512.991	14.695	14.139	.2356	0.00	8.04	[illegible]	.0743
12	7.8530	261.28	0.00	261.28	518.688	513.010	14.695	14.141	.2352	0.00	6.83	[illegible]	.0743
13	7.9915	260.61	0.00	260.61	518.688	513.039	14.695	14.144	.2346	0.00	5.65	[illegible]	.0743
14	8.1254	259.69	0.00	259.69	518.688	513.078	14.695	14.147	.2337	0.00	4.51	[illegible]	.0743
15	8.2600	258.51	0.00	258.51	518.688	513.129	14.695	14.152	.2326	0.00	3.41	[illegible]	.0744
16	8.3933	257.05	0.00	257.05	518.688	513.192	14.695	14.158	.2313	0.00	2.36	-19.317	.0744
17	8.5315	255.29	0.00	255.29	518.688	513.267	14.695	14.166	.2297	0.00	1.38	-17.276	.0744
18	8.6659	253.22	0.00	253.22	518.688	513.354	14.695	14.174	.2278	0.00	.43	-15.306	.0744
19	8.8077	250.81	0.00	250.81	518.688	513.456	14.695	14.184	.2256	0.00	-.43	-13.636	.0745
20	8.9473	248.02	0.00	248.02	518.688	513.571	14.695	14.195	.2231	0.00	-1.21	[illegible]	.0745
21	9.0900	244.81	0.00	244.81	518.688	513.703	14.695	14.208	.2202	0.00	-1.91	-10.518	.0746

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6015	280.28	0.00	280.28	518.688	512.154	14.696	14.058	.2525	0.00	20.54	-83.031	.0740
2	6.7241	281.39	0.00	281.39	518.688	512.073	14.696	14.051	.2540	0.00	19.19	-96.166	.0740
3	6.8459	283.57	0.00	283.57	518.688	511.994	14.696	14.043	.2556	0.00	17.84	-95.067	.0740
4	6.9637	285.25	0.00	285.25	518.688	511.919	14.696	14.036	.2570	0.00	16.48	-90.627	.0739
5	7.0871	286.71	0.00	286.71	518.688	511.850	14.696	14.029	.2583	0.00	15.12	-78.487	.0739
6	7.2059	287.93	0.00	287.93	518.688	511.790	14.696	14.024	.2595	0.00	13.75	-65.352	.0739
7	7.3253	288.03	0.00	288.03	518.688	511.739	14.696	14.019	.2605	0.00	12.38	-53.945	.0739
8	7.4435	289.31	0.00	289.31	518.688	511.702	14.696	14.015	.2612	0.00	11.00	-44.312	.0738
9	7.5640	290.29	0.00	290.29	518.688	511.678	14.696	14.013	.2616	0.00	9.62	-36.635	.0738
10	7.6835	290.43	0.00	290.43	518.688	511.671	14.696	14.012	.2617	0.00	8.23	-30.629	.0738
11	7.8023	290.21	0.00	290.21	518.688	511.682	14.696	14.013	.2615	0.00	6.86	-25.978	.0738
12	7.9226	289.59	0.00	289.59	518.688	511.712	14.696	14.016	.2610	0.00	5.50	-22.354	.0739
13	8.0429	288.55	0.00	288.55	518.688	511.762	14.696	14.021	.2600	0.00	4.16	-19.494	.0739
14	8.1639	287.11	0.00	287.11	518.688	511.831	14.696	14.028	.2587	0.00	2.84	-17.208	.0739
15	8.2854	285.23	0.00	285.23	518.688	511.921	14.696	14.036	.2570	0.00	1.54	-15.349	.0739
16	8.4031	282.93	0.00	282.93	518.688	512.029	14.696	14.047	.2549	0.00	.28	-13.813	.0740
17	8.5337	280.20	0.00	280.20	518.688	512.157	14.696	14.059	.2524	0.00	-.94	-12.523	.0740
18	8.6538	277.05	0.00	277.05	518.688	512.303	14.696	14.073	.2495	0.00	-2.13	-11.407	.0741
19	8.7873	273.47	0.00	273.47	518.688	512.467	14.696	14.089	.2463	0.00	-3.28	-10.416	.0741
20	8.9175	269.45	0.00	269.45	518.688	512.649	14.696	14.106	.2426	0.00	-4.39	-9.519	.0742
21	9.0000	264.38	0.00	264.38	518.688	512.848	14.696	14.125	.2385	0.00	-5.47	-8.690	.0743

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7510	305.75	0.00	305.75	518.688	510.912	14.696	13.940	.2757	0.00	20.32	-388.834	.0736
2	6.8621	308.57	0.00	308.57	518.688	510.768	14.696	13.926	.2783	0.00	18.88	-217.743	.0735
3	6.9733	311.16	0.00	311.16	518.688	510.634	14.696	13.913	.2807	0.00	17.52	-184.039	.0735
4	7.0633	313.54	0.00	313.54	518.688	510.511	14.696	13.901	.2829	0.00	16.25	-167.245	.0734
5	7.1937	315.71	0.00	315.71	518.688	510.397	14.696	13.891	.2849	0.00	14.85	-143.444	.0734
6	7.3031	317.64	0.00	317.64	518.688	510.295	14.696	13.881	.2866	0.00	13.42	-111.007	.0733
7	7.4121	319.29	0.00	319.29	518.688	510.209	14.696	13.873	.2882	0.00	11.96	-79.718	.0733
8	7.5208	320.57	0.00	320.57	518.688	510.139	14.696	13.866	.2893	0.00	10.46	-56.377	.0733
9	7.6294	321.43	0.00	321.43	518.688	510.094	14.696	13.862	.2901	0.00	8.93	-40.671	.0733
10	7.7381	321.79	0.00	321.79	518.688	510.074	14.696	13.860	.2905	0.00	7.39	-31.003	.0733
11	7.8471	321.62	0.00	321.62	518.688	510.084	14.696	13.861	.2903	0.00	5.85	-25.113	.0733
12	7.9563	320.92	0.00	320.92	518.688	510.121	14.696	13.864	.2897	0.00	4.31	-21.154	.0733
13	8.0663	319.70	0.00	319.70	518.688	510.186	14.696	13.871	.2885	0.00	2.79	-18.219	.0733
14	8.1774	317.93	0.00	317.93	518.688	510.280	14.696	13.879	.2869	0.00	1.28	-15.891	.0733
15	8.2892	315.53	0.00	315.43	518.688	510.401	14.696	13.891	.2848	0.00	-.21	-14.047	.0734
16	8.4031	312.90	0.00	312.93	518.688	510.549	14.696	13.905	.2822	0.00	-1.65	-12.756	.0734
17	8.5191	309.53	0.00	309.53	518.688	510.719	14.696	13.921	.2792	0.00	-3.04	-11.991	.0735
18	8.6362	305.99	0.00	305.99	518.688	510.909	14.696	13.939	.2759	0.00	-4.38	-11.512	.0736
19	8.7552	301.93	0.00	301.93	518.688	511.105	14.696	13.958	.2723	0.00	-5.69	-11.107	.0736
20	8.8754	297.65	0.00	297.65	518.688	511.319	14.696	13.978	.2683	0.00	-6.98	-10.702	.0737
21	9.0000	293.05	0.00	293.15	518.688	511.544	14.696	14.000	.2641	0.00	-8.25	-10.317	.0738

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON 1	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	6.878	-70.039	9.182	0.0000	841.8	.8078	895.63	21.416	577.102	1.000	0.000	1.0000	1.0000
2	-61.337	[illegible]	-70.173	9.436	0.0000	855.4	.8206	909.74	21.673	579.188	1.000	0.000	1.0000	1.0000
3	-61.714	[illegible]	-70.314	8.599	0.0000	869.7	.8333	923.67	21.934	581.339	1.000	0.000	1.0000	1.0000
4	[illegible]	[illegible]	-70.460	8.402	0.0000	883.3	.8459	937.55	22.201	[illegible]	1.000	0.000	1.0000	1.0000
5	[illegible]	[illegible]	-70.613	8.252	0.0000	897.2	.8582	951.10	22.473	[illegible]	1.000	0.000	1.0000	1.0000
6	[illegible]	[illegible]	-70.774	8.135	0.0000	910.6	.8705	964.61	22.749	[illegible]	1.000	0.000	1.0000	1.0000
7	[illegible]	[illegible]	-70.945	8.039	0.0000	924.4	.8826	977.99	23.031	[illegible]	1.000	0.000	1.0000	1.0000
8	-63.174	[illegible]	-71.131	7.967	0.0000	938.8	.8946	991.23	23.319	[illegible]	1.000	0.000	1.0000	1.0000
9	[illegible]	[illegible]	-71.334	7.897	0.0000	951.5	.9065	1004.33	23.614	[illegible]	1.000	0.000	1.0000	1.0000
10	-63.733	[illegible]	-71.560	7.827	0.0000	965.1	.9182	1017.30	23.916	[illegible]	1.000	0.000	1.0000	1.0000
11	[illegible]	[illegible]	[illegible]	7.774	0.0000	978.7	.9296	1030.15	24.226	[illegible]	1.000	0.000	1.0000	1.0000
12	[illegible]	[illegible]	-72.078	7.734	0.0000	992.3	.9413	1042.91	24.544	[illegible]	1.000	0.000	1.0000	1.0000
13	[illegible]	[illegible]	-72.371	7.672	0.0000	1006.0	.9527	1055.62	24.873	[illegible]	1.000	0.000	1.0000	1.0000
14	[illegible]	[illegible]	-72.686	7.614	0.0000	1019.9	.9641	1068.31	25.211	[illegible]	1.000	0.000	1.0000	1.0000
15	-65.576	[illegible]	-73.024	7.548	0.0000	1033.9	.9754	1081.01	[illegible]	[illegible]	1.000	0.000	1.0000	1.0000
16	[illegible]	[illegible]	-73.392	7.471	0.0000	1048.1	.9868	1093.77	[illegible]	[illegible]	1.000	0.000	1.0000	1.0000
17	[illegible]	-6.376	-73.758	7.385	0.0000	1062.5	.9982	1106.63	[illegible]	[illegible]	1.000	0.000	1.0000	1.0000
18	[illegible]	-7.078	-74.145	7.293	0.0000	1077.1	1.0098	1119.66	26.635	[illegible]	1.000	0.000	1.0000	1.0000
19	-67.337	-7.717	-74.354	7.207	0.0000	1091.9	1.0215	1132.88	27.103	617.788	1.000	0.000	1.0000	1.0000
20	-67.824	-8.561	-74.951	7.127	0.0000	1107.0	1.0335	1146.34	27.530	620.456	1.000	0.000	1.0000	1.0000
21	-68.316	-9.607	-75.368	7.052	0.0050	1122.4	1.0456	1160.06	27.976	623.303	1.000	0.000	1.0000	1.0000

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------ MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8979	346.35	161.32	382.33	541.853	529.788	16.973	15.683	.3387	25.06	22.32	6.199	[illegible]
2	[illegible]	[illegible]	155.93	381.84	541.471	529.350	16.940	15.650	.3384	24.27	20.83	[illegible]	[illegible]
3	[illegible]	349.81	152.33	381.55	541.122	529.018	16.905	15.619	.3382	23.53	19.27	[illegible]	[illegible]
4	7.1999	[illegible]	148.22	[illegible]	540.821	528.714	16.875	[illegible]	[illegible]	22.86	17.64	[illegible]	[illegible]
5	7.2992	[illegible]	144.60	382.09	540.579	528.442	16.853	[illegible]	[illegible]	22.24	15.93	[illegible]	[illegible]
6	7.3976	[illegible]	141.47	382.79	540.394	528.212	16.833	[illegible]	.3396	[illegible]	[illegible]	[illegible]	[illegible]
7	7.4957	357.38	138.65	383.52	540.244	528.015	16.825	15.530	.3403	21.19	[illegible]	[illegible]	[illegible]
8	7.5932	359.09	135.26	384.07	540.147	527.883	15.821	15.522	[illegible]	20.78	[illegible]	[illegible]	[illegible]
9	7.6903	[illegible]	[illegible]	384.33	540.105	527.824	16.822	15.521	[illegible]	20.45	[illegible]	[illegible]	[illegible]
10	7.7873	359.73	134.54	384.07	540.418	528.154	16.823	15.529	.3407	20.51	[illegible]	[illegible]	[illegible]
11	[illegible]	358.78	135.13	383.36	540.706	528.567	16.833	15.545	.3399	20.64	4.35	[illegible]	[illegible]
12	7.9829	357.23	135.90	382.21	[illegible]	[illegible]	16.857	15.570	[illegible]	[illegible]	2.34	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.881	15.603	.3373	[illegible]	.27	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	378.70	541.980	530.056	16.911	[illegible]	.3354	[illegible]	[illegible]	[illegible]	[illegible]
15	8.2030	349.87	139.35	376.41	[illegible]	530.762	16.945	15.692	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	142.99	[illegible]	543.557	[illegible]	16.992	15.745	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	544.612	[illegible]	17.021	[illegible]	[illegible]	[illegible]	-6.72	[illegible]	[illegible]
18	[illegible]	336.11	149.92	368.03	545.423	[illegible]	17.059	[illegible]	.3247	24.06	[illegible]	[illegible]	[illegible]
19	8.7080	[illegible]	151.72	364.64	546.080	535.035	17.083	15.909	.3214	24.59	-8.97	[illegible]	[illegible]
20	8.8138	[illegible]	[illegible]	360.67	546.651	535.837	17.102	15.947	.3177	[illegible]	-9.49	[illegible]	[illegible]
21	8.9348	321.21	153.04	[illegible]	547.043	536.520	17.085	15.962	.3132	25.48	-9.38	-1665.[illegible]	[illegible]

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.348	4.253	-63.621	4.673	.0247	860.3	.6985	779.52	21.572	580.180	1.155	.045	.9430	.9442
2	-59.422	4.234	-64.071	4.649	.0235	872.9	.7054	796.18	21.814	582.006	1.153	.044	.9436	.9447
3	-59.867	4.070	-64.491	4.625	.0224	885.5	.7200	812.30	22.060	583.839	1.150	.043	.9441	.9452
4	-60.263	3.702	-64.871	4.601	.0214	897.9	.7362	828.09	22.310	585.585	1.148	.043	.9448	.9458
5	-60.628	3.224	-65.209	4.581	.0204	910.3	.7480	843.44	22.564	587.543	1.147	.042	.9455	.9466
6	-60.957	2.840	-65.519	4.567	.0195	922.6	.7614	858.31	22.821	589.416	1.146	.042	.9465	.9475
7	-61.256	2.541	-65.814	4.560	.0181	934.8	.7744	872.79	23.086	591.297	1.145	.042	.9487	.9497
8	-61.546	2.228	-66.110	4.564	.0169	947.0	.7868	886.69	23.355	593.195	1.145	.041	.9510	.9520
9	-61.832	1.852	-66.414	4.582	.0157	959.1	.7986	900.08	23.629	595.118	1.145	.041	.9538	.9544
10	-62.118	1.425	-66.734	4.616	.0194	971.2	.8079	910.72	23.860	597.049	1.145	.042	.9421	.9432
11	-62.407	.980	-67.074	4.667	.0230	983.4	.8167	920.98	24.096	599.020	1.146	.043	.9312	.9325
12	-62.707	.541	-67.435	4.729	.0262	995.6	.8252	930.96	24.343	601.028	1.147	.043	.9216	.9231
13	-63.022	.037	-67.816	4.794	.0279	1007.3	.8338	941.15	24.611	603.079	1.149	.044	.9163	.9179
14	-63.360	-.412	-68.215	4.855	.0295	1020.4	.8422	951.05	24.889	605.176	1.151	.045	.9114	.9131
15	-63.729	-.958	-68.631	4.902	.0325	1033.0	.8497	960.18	25.160	607.326	1.153	.046	.9041	.9058
16	-64.133	-1.408	-69.034	4.931	.0412	1045.9	.8545	966.69	25.373	609.348	1.156	.048	.8797	.8821
17	-64.573	-1.739	-69.515	4.942	.0498	1059.0	.8594	973.31	25.593	611.328	1.158	.050	.8575	.8605
18	-65.045	-1.821	-69.990	4.935	.0551	1072.4	.8661	981.77	25.864	614.194	1.161	.052	.8443	.8476
19	-65.551	-1.936	-70.451	4.910	.0591	1086.0	.8738	991.48	26.163	616.538	1.163	.053	.8339	.8374
20	-66.097	-2.445	-70.970	4.872	.0637	1100.0	.8824	1001.85	26.466	619.164	1.164	.054	.8214	.8252
21	-66.694	-3.111	-71.521	4.827	.0695	1114.2	.8920	1013.41	26.766	621.777	1.163	.055	.8046	.8087

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.152 ISEN. EFF.= .982 POLY. EFF.= .904 DELTA T ON T = .046

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	387.97	303.55	492.61	563.236	543.073	19.273	16.967	.4310	38.04	24.67	68.453	.0042
2	7.1664	393.13	299.28	494.09	563.157	542.872	19.277	16.953	.4324	37.28	22.78	133.117	.0042
3	7.2530	398.13	295.31	495.70	563.097	542.679	19.274	16.939	.4339	36.57	20.98	376.968	.0042
4	7.3382	403.08	291.60	497.50	563.053	542.487	19.280	16.925	.4355	35.88	19.89	757.532	.0041
5	7.4223	408.00	288.03	499.43	563.011	542.285	19.283	16.910	.4373	35.22	17.13	232.769	.0041
6	7.5047	412.33	284.51	501.38	562.958	542.070	19.284	16.893	.4391	34.57	15.11	83.888	.0040
7	7.5894	417.64	280.66	503.18	562.834	541.795	19.233	16.875	.4408	33.90	13.06	41.117	.0040
8	7.6672	421.91	275.60	504.49	562.658	541.509	19.275	16.856	.4420	33.25	10.96	24.218	.0039
9	7.7473	425.41	272.13	505.01	562.488	541.288	19.258	16.835	.4426	32.61	8.84	16.002	.0039
10	7.8273	425.49	271.05	504.49	562.676	541.527	19.225	16.812	.4420	32.50	6.78	11.658	.0037
11	7.9079	424.41	269.17	502.53	562.824	541.834	19.177	16.787	.4402	32.38	4.57	9.053	.0036
12	7.9893	422.26	266.27	499.19	562.794	542.088	19.112	16.761	.4371	32.24	2.46	7.413	.0034
13	8.0719	419.29	261.41	494.11	562.438	542.151	19.031	16.734	.4327	31.96	.37	6.361	.0032
14	8.1539	414.72	253.70	487.26	561.948	542.213	18.934	16.707	.4266	31.66	-1.69	5.648	.0031
15	8.2421	407.46	250.64	478.54	561.520	542.491	18.821	16.680	.4189	31.58	-3.69	5.356	.0029
16	8.3313	395.57	250.06	467.98	561.884	543.686	18.693	16.657	.4092	32.30	-5.56	5.132	.0026
17	8.4248	380.49	245.62	454.59	562.152	544.981	18.540	16.639	.3970	33.19	-7.21	5.206	.0024
18	8.5237	363.28	243.65	437.44	561.749	545.850	18.384	16.626	.3817	33.86	-8.56	5.659	.0022
19	8.6239	343.62	236.60	416.38	561.019	546.613	18.206	16.621	.3631	34.63	-9.51	6.992	.0020
20	8.7427	316.33	223.41	391.28	560.278	547.558	18.017	16.624	.3403	35.90	-9.88	11.177	.0019
21	8.8679	284.71	222.81	361.53	559.657	548.797	17.822	16.648	.3147	38.05	-9.38	1665.883	.0018

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	3.681	.0582	[illegible]	[illegible]	697.16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	3.466	.0475	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	-56.336	3.250	.0453	904.6	.6370	727.80	22.256	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	.0431	915.2	[illegible]	742.52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	.0410	[illegible]	[illegible]	756.95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	-.116	-57.637	[illegible]	.0390	936.0	.6754	771.24	22.930	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	-57.989	2.537	.0364	946.1	[illegible]	785.67	23.163	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	.0338	956.2	[illegible]	799.93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7135	814.07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	976.2	.7216	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	986.2	.7293	833.24	23.925	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	.0523	996.4	[illegible]	843.43	24.082	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1006.7	[illegible]	853.13	24.274	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	3.760	.0591	1017.2	.7592	[illegible]	24.474	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	-62.374	4.347	.0651	1027.9	.7663	[illegible]	24.651	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	-63.372	[illegible]	.0827	1039.0	.7718	882.58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	.1002	1050.7	[illegible]	887.56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7822	896.30	24.903	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	7.923	.1190	1076.2	[illegible]	906.79	25.106	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	-69.790	9.176	.1280	1090.3	.7994	917.41	25.325	617.417	[illegible]	[illegible]	.7475	[illegible]
21	-61.548	4.915	-72.132	10.591	.1359	1106.0	.8076	927.91	25.538	620.260	1.213	.079	.7172	.7248

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.256 ISEN. EFF.= .898 POLY. EFF.= .892 DELTA T ON T = .084

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	[illegible]	450.42	[illegible]	[illegible]	558.972	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	435.74	657.96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	432.14	659.16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	661.27	[illegible]	[illegible]	22.110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	661.91	[illegible]	[illegible]	[illegible]	[illegible]	.5754	[illegible]	10.79	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	636.91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	624.35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	410.32	609.14	[illegible]	[illegible]	21.647	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21.452	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	282.17	384.57	476.99	[illegible]	[illegible]	20.467	18.257	.4874	53.73	-9.37	[illegible]	.0864

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-43.544	3.417	.0757	905.7	.5709	657.23	22.078	586.845	1.499	.131	.9377	.9412
2	-41.095	1.238	-44.133	3.234	.0719	914.4	.5847	672.92	22.273	588.224	1.498	.130	.9391	.9425
3	-41.730	.635	-44.741	3.052	.0632	923.7	.5971	686.97	22.470	589.584	1.498	.130	.9406	.9439
4	-42.343	.037	-45.216	2.873	.0648	932.5	.6093	699.84	22.654	590.930	1.499	.130	.9420	.9453
5	-42.935	-.735	-45.537	2.702	.0617	941.1	.6198	711.87	22.857	592.267	1.501	.130	.9435	.9466
6	-43.503	-1.246	-46.043	2.544	.0587	949.6	.6287	723.28	23.051	593.600	1.502	.130	.9450	.9480
7	-44.035	-1.232	-46.458	2.414	.0546	958.0	.6358	734.77	23.257	594.931	1.505	.131	.9475	.9505
8	-44.538	-1.015	-46.997	2.329	.0508	965.3	.6484	745.78	23.464	596.262	1.507	.131	.9501	.9529
9	-45.015	-.528	-47.323	2.318	.0471	974.5	.6576	756.41	23.673	597.598	1.508	.131	.9526	.9553
10	-45.474	-.133	-47.147	2.373	.0513	982.9	.6593	759.10	23.733	598.349	1.508	.132	.9406	.9439
11	-45.924	.455	-48.472	2.543	.0591	991.3	.6610	761.70	23.836	600.328	1.507	.134	.9286	.9326
12	-46.370	1.252	-49.225	2.833	.0735	999.9	.6630	764.75	23.935	601.739	1.504	.135	.9175	.9221
13	-46.817	2.136	-50.167	3.331	.0837	1008.6	.6671	770.05	24.013	603.188	1.500	.135	.9101	.9151
14	-47.263	3.235	-51.205	3.997	.0856	1017.5	.6713	775.44	24.147	604.579	1.494	.134	.9024	.9078
15	-47.726	4.452	-52.520	4.034	.0975	1026.6	.6732	773.40	24.239	606.227	1.484	.134	.8899	.8959
16	-48.205	5.738	-54.270	5.064	.1239	1035.2	.6652	773.94	24.130	607.863	1.473	.136	.8586	.8661
17	-48.730	7.081	-55.230	7.558	.1501	1046.4	.6567	762.97	24.022	609.525	1.460	.138	.8264	.8354
18	-49.304	8.422	-58.712	9.403	.1581	1057.4	.6543	761.60	24.049	611.543	1.444	.138	.8032	.8131
19	-49.925	9.590	-61.527	11.592	.1793	1069.3	.6547	763.37	24.141	613.553	1.427	.136	.7825	.7931
20	-50.595	10.377	-64.735	14.137	.1913	1082.5	.6552	765.32	24.245	616.020	1.409	.135	.7596	.7710
21	-51.301	13.330	-65.413	17.052	.2094	1097.7	.6551	766.95	24.354	618.757	1.393	.135	.7336	.7457

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.481 ISEN. EFF.= .888 POLY. EFF.= .894 DELTA T ON T = .134

STATION 8 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	612.97	592.19	852.01	610.077	549.515	25.099	17.431	.7409	44.03	19.79	-2.220	.0855
2	7.5011	605.02	591.45	846.10	610.601	551.174	25.135	17.597	.7343	44.35	17.77	-2.456	.0861
3	7.5533	598.25	590.80	840.81	611.136	552.452	25.232	17.754	.7294	44.64	15.89	-2.744	.0867
4	7.6053	592.28	589.94	835.95	611.642	553.635	25.335	17.901	.7244	44.89	14.14	-3.096	.0872
5	7.6597	587.14	588.75	831.49	612.100	554.713	25.470	18.036	.7199	45.08	12.49	-3.527	.0877
6	7.7113	582.92	587.35	827.51	612.524	555.686	25.590	18.150	.7159	45.22	10.94	-4.061	.0881
7	7.7650	580.35	585.53	824.41	612.979	556.469	25.685	18.274	.7125	45.25	9.47	-4.739	.0885
8	7.8190	579.54	583.77	821.90	613.240	557.172	25.723	18.380	.7100	45.25	8.09	-5.542	.0889
9	7.8733	577.51	581.33	819.53	613.565	557.902	25.805	18.477	.7073	45.21	6.77	-6.925	.0893
10	7.9240	567.34	585.13	816.03	614.961	559.598	25.831	18.567	.7034	45.91	5.50	-8.650	.0894
11	7.9853	553.15	590.11	812.23	616.303	561.547	25.847	18.652	.6990	46.59	4.27	-11.959	.0896
12	8.0433	543.70	592.73	807.69	617.439	563.304	25.843	18.733	.6939	47.21	3.08	-19.048	.0897
13	8.1025	540.34	591.55	801.59	617.973	564.654	25.812	18.811	.6879	47.56	1.91	-37.024	.0898
14	8.1632	531.48	587.93	792.53	618.103	565.982	25.724	18.885	.6793	47.89	.73	456.070	.0900
15	8.2253	515.47	583.65	779.35	619.135	567.737	25.545	18.957	.6670	48.43	-.46	32.470	.0900
16	8.2919	483.12	587.97	752.25	619.674	571.467	25.282	19.031	.6503	50.47	-1.69	18.044	.0898
17	8.3637	449.70	591.73	742.61	621.196	575.446	24.934	19.112	.6313	52.83	-2.92	13.697	.0895
18	8.4422	414.35	587.29	719.04	621.383	578.495	24.673	19.203	.6037	54.76	-4.19	12.201	.0895
19	8.5255	373.04	573.66	692.39	621.865	581.297	24.354	19.306	.5859	56.82	-5.62	12.929	.0895
20	8.6243	337.65	574.07	660.53	621.343	584.501	24.075	19.427	.5623	59.56	-7.32	19.292	.0896
21	8.7359	289.47	575.43	644.14	622.805	588.395	23.831	19.572	.5415	63.30	-9.37	**********	.0897

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	2.060	[illegible]	4.613	.1013	928.0	.6079	699.07	22.374	[illegible]	1.708	.176	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	4.664	[illegible]	935.5	[illegible]	696.00	[illegible]	[illegible]	1.714	.177	[illegible]	[illegible]
3	[illegible]	[illegible]	-30.418	4.661	.0909	942.0	.6018	693.73	22.677	[illegible]	[illegible]	.178	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	4.552	.0864	948.6	.6080	692.39	22.832	593.442	[illegible]	.179	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	.0822	955.2	.5992	692.08	22.989	[illegible]	[illegible]	.180	[illegible]	[illegible]
6	[illegible]	1.140	-32.715	[illegible]	.0782	961.8	.5993	692.82	23.150	595.340	1.735	.181	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	.0729	968.5	.6010	695.34	23.327	596.612	1.744	.182	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	.0677	975.2	.6035	698.65	23.507	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6067	702.70	23.691	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	-35.347	[illegible]	.0777	[illegible]	.6080	696.16	23.682	599.921	[illegible]	.186	[illegible]	[illegible]
11	[illegible]	[illegible]	-36.817	[illegible]	.0921	995.9	.5938	690.10	23.675	601.091	1.759	.188	[illegible]	[illegible]
12	[illegible]	4.023	-36.796	[illegible]	.1047	1003.1	.5867	685.21	23.604	602.277	1.759	.190	[illegible]	[illegible]
13	[illegible]	[illegible]	-37.758	5.373	.1116	1010.5	.5872	684.21	23.759	603.511	[illegible]	.191	[illegible]	[illegible]
14	[illegible]	6.471	-38.985	6.098	.1182	1018.1	.5861	683.73	23.827	604.786	[illegible]	.192	[illegible]	[illegible]
15	[illegible]	[illegible]	-40.572	7.202	.1300	1025.9	.5819	679.94	23.842	[illegible]	1.738	[illegible]	.9315	[illegible]
16	[illegible]	9.338	-42.605	8.763	.1650	1034.1	.5622	659.89	23.583	[illegible]	1.728	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	.1993	1043.1	.5411	636.44	[illegible]	[illegible]	1.701	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	.2212	1052.9	.5248	623.60	[illegible]	[illegible]	1.679	.196	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	16.770	.2375	1063.6	.5200	614.73	23.212	612.697	1.657	.197	[illegible]	[illegible]
20	-35.448	[illegible]	-56.028	20.572	.2556	1075.6	.5096	604.14	23.193	615.778	1.638	.198	.7643	[illegible]
21	-35.617	13.234	-60.616	24.999	.2779	1089.5	.4960	589.97	23.153	617.265	1.626	.201	.7411	.7581

STATION 8 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.721 ISEN. EFF.= .888 POLY. EFF.= .897 DELTA T ON T = .189

STATION 9 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5699	610.78	736.58	961.94	633.844	557.075	28.407	18.113	.8310	49.97	10.63	[illegible]	.0877
2	7.5916	[illegible]	730.52	951.52	633.514	558.402	28.451	18.202	.8211	[illegible]	9.87	-3.183	[illegible]
3	7.6344	[illegible]	724.38	942.52	633.207	559.510	28.437	18.425	.8123	[illegible]	9.14	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	934.69	632.919	560.541	28.415	[illegible]	.8051	[illegible]	9.42	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	561.229	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	7.8147	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28.335	18.830	.7879	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	691.74	909.36	631.387	562.705	28.297	[illegible]	.7817	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	569.978	28.372	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	573.199	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	577.649	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	867.51	651.671	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	8.5777	[illegible]	764.16	[illegible]	654.361	593.854	27.773	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	8.6699	381.87	774.76	850.61	657.717	597.773	27.673	19.783	.7896	65.62	-8.95	20.749	.0852

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.931	-18.333	5.686	.1252	941.6	.5631	651.78	22.451	592.349	1.938	.222	.9363	.9419
2	-13.489	10.644	-19.535	6.047	.1197	946.8	.5583	647.06	22.591	593.165	1.937	.221	.9376	.9431
3	-14.333	10.170	-20.691	6.338	.1127	952.1	.5557	644.58	22.723	594.005	1.935	.221	.9388	.9442
4	-15.163	9.461	-21.800	6.635	.1073	957.6	.5547	643.96	22.858	594.870	1.934	.220	.9399	.9452
5	-16.005	8.629	-22.868	6.861	.1021	963.2	.5551	644.90	22.997	595.758	1.932	.220	.9411	.9463
6	-16.849	7.824	-23.899	7.050	.0973	968.8	.5567	647.17	23.139	596.668	1.931	.219	.9422	.9473
7	-17.653	7.220	-25.003	7.350	.0907	974.6	.5604	651.69	23.303	597.600	1.928	.218	.9445	.9494
8	-18.389	6.810	-26.066	7.678	.0844	980.5	.5649	657.13	23.470	598.552	1.925	.217	.9468	.9515
9	-19.054	6.646	-27.092	8.039	.0784	986.4	.5701	663.35	23.642	599.523	1.923	.216	.9491	.9536
10	-19.558	6.759	-27.237	7.629	.0971	992.5	.5620	655.04	23.574	600.322	1.927	.220	.9362	.9418
11	-20.216	7.158	-27.493	7.277	.1150	998.8	.5541	646.90	23.506	601.358	1.932	.224	.9234	.9301
12	-20.734	7.844	-27.326	7.992	.1308	1005.3	.5472	639.91	23.456	602.632	1.935	.227	.9116	.9194
13	-21.215	8.771	-28.734	7.519	.1394	1011.9	.5448	637.86	23.481	603.745	1.931	.228	.9038	.9122
14	-21.650	9.961	-29.654	8.004	.1477	1018.7	.5428	636.22	23.509	604.895	1.926	.230	.8959	.9051
15	-22.057	11.011	-30.551	8.494	.1625	1025.9	.5363	629.58	23.461	606.090	1.921	.232	.8834	.8936
16	-22.389	12.136	-31.236	8.399	.2052	1033.2	.5077	598.39	23.066	607.359	1.913	.239	.8512	.8641
17	-22.628	13.144	-32.367	9.739	.2496	1041.3	.4757	562.96	22.655	608.745	1.905	.247	.8189	.8345
18	-22.716	13.395	-33.790	11.074	.2761	1050.0	.4552	540.29	22.454	610.267	1.900	.252	.7977	.8158
19	-22.570	13.950	-35.506	12.936	.2964	1059.5	.4387	522.18	22.329	611.921	1.895	.256	.7803	.7998
20	-22.138	13.599	-37.738	13.593	.3191	1069.8	.4182	499.32	22.173	613.732	1.890	.262	.7610	.7813
21	-21.371	13.159	-41.121	13.749	.3473	1081.3	.3888	466.03	21.955	615.763	1.883	.258	.7380	.7601

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.920 ISEN. EFF.= .881 POLY. EFF.= .892 DELTA T ON T = .232

STATION 10 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5749	582.60	734.17	937.25	633.844	560.971	28.487	18.561	.8059	51.57	7.82	9.349	.0892
2	7.6197	583.49	727.74	932.77	633.514	561.336	28.461	18.621	.8028	51.28	7.95	8.919	.0894
3	7.6654	586.91	721.46	930.04	633.207	561.451	28.437	18.650	.8004	50.87	7.84	9.315	.0896
4	7.7113	591.70	715.36	928.36	632.919	561.472	28.415	18.662	.7989	50.40	7.58	10.527	.0896
5	7.7573	597.11	709.33	927.24	632.642	561.316	28.394	18.665	.7981	49.91	7.23	11.815	.0897
6	7.8032	602.64	703.52	926.35	632.368	561.179	28.374	18.664	.7974	49.42	6.83	13.049	.0897
7	7.8489	608.43	695.14	924.55	631.836	560.921	28.335	18.663	.7960	48.85	6.40	14.152	.0897
8	7.8946	613.42	689.87	922.67	631.307	560.680	28.297	18.665	.7946	48.30	5.94	14.967	.0898
9	7.9403	615.81	681.69	920.67	630.780	560.458	28.259	18.669	.7930	47.77	5.46	15.420	.0898
10	7.9865	614.95	689.78	924.10	632.767	561.924	28.324	18.677	.7943	48.28	4.98	15.547	.0896
11	8.0337	610.60	697.98	927.37	634.800	563.461	28.391	18.689	.7967	48.82	4.47	15.409	.0894
12	8.0819	606.00	704.63	929.42	636.614	564.965	28.433	18.707	.7974	49.31	3.92	15.069	.0893
13	8.1311	601.39	703.75	926.04	637.175	566.047	28.372	18.731	.7957	49.46	3.35	14.574	.0892
14	8.1813	597.12	702.77	922.19	637.738	567.203	28.304	18.762	.7836	49.65	2.72	14.255	.0892
15	8.2326	587.52	705.10	917.85	639.583	569.013	28.223	18.803	.7847	50.19	2.05	13.903	.0891
16	8.2859	559.73	722.26	913.15	642.608	573.465	28.123	18.859	.7776	52.28	1.27	13.588	.0887
17	8.3452	524.11	740.25	907.00	646.577	578.375	28.003	18.936	.7691	54.70	.31	13.152	.0883
18	8.4080	496.64	750.53	899.37	649.331	582.193	27.922	19.035	.7607	56.51	-.88	12.311	.0882
19	8.4776	470.32	757.81	891.83	651.672	585.742	27.852	19.153	.7516	58.17	-2.31	10.569	.0882
20	8.5537	438.53	765.30	882.91	654.361	589.762	27.773	19.281	.7415	60.22	-4.03	7.263	.0881
21	8.6399	400.50	777.47	874.56	657.717	594.344	27.673	19.388	.7317	62.75	-6.18	3.853	.0880

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6139	568.22	723.91	924.93	633.844	562.877	28.497	18.783	.7950	52.10	9.06	26.367	[illegible]
2	7.6770	604.75	722.30	942.04	633.514	559.592	28.451	18.453	.8118	50.06	8.76	-65.431	[illegible]
3	7.7304	637.97	715.39	958.54	633.207	556.980	28.437	18.135	.8282	48.27	8.26	-20.854	.0878
4	7.7808	664.69	703.03	971.86	632.919	554.551	28.415	17.874	.8413	46.85	7.69	-14.666	.0869
5	7.8263	685.04	703.09	981.63	632.642	552.689	28.394	17.679	.8514	45.75	7.12	-12.497	.0862
6	7.8717	700.35	697.39	988.36	632.368	551.314	28.374	17.540	.8583	44.88	6.59	-11.749	.0858
7	7.9133	712.13	690.23	991.78	631.836	550.216	28.335	17.446	.8621	44.11	6.11	-11.863	.0855
8	7.9531	720.76	683.36	993.21	631.307	549.450	28.297	17.388	.8640	43.47	5.70	-12.719	[illegible]
9	8.0004	726.83	675.57	992.99	630.780	548.959	28.253	17.362	.8641	42.95	5.35	-14.491	[illegible]
10	8.0425	724.19	684.98	996.82	632.767	550.318	28.324	17.360	.8664	43.41	5.03	-17.376	[illegible]
11	8.0849	719.75	693.56	999.53	634.800	551.908	28.391	17.361	.8675	43.94	4.71	-22.229	[illegible]
12	8.1277	713.75	700.71	1000.22	636.614	553.615	28.433	17.423	.8668	44.47	4.38	-31.956	.0849
13	8.1710	706.79	700.32	994.99	637.175	555.044	28.372	17.486	.8612	44.74	4.04	-62.709	.0849
14	8.2148	698.22	693.90	988.63	637.738	556.658	28.304	17.566	.8544	45.07	3.68	646.887	[illegible]
15	8.2595	684.79	702.83	981.27	638.893	559.009	28.223	17.670	.8463	45.74	3.27	48.286	[illegible]
16	8.3059	653.31	720.61	973.01	642.608	564.058	28.120	17.801	.8354	47.78	2.74	25.870	[illegible]
17	8.3535	615.30	739.34	961.88	646.577	569.859	28.003	17.977	.8217	50.23	1.96	18.591	[illegible]
18	8.4031	577.95	750.50	947.24	649.331	574.342	27.922	18.217	.8056	52.40	.88	15.815	[illegible]
19	8.4578	533.52	758.68	927.49	651.672	580.306	27.852	18.544	.7852	54.88	-.51	15.781	[illegible]
20	8.5355	470.74	767.93	900.73	654.361	587.124	27.773	18.980	.7581	58.49	-2.26	-24.170	.0872
21	8.6139	379.50	779.23	866.77	657.717	595.470	27.673	19.517	.7243	64.03	-4.27	-27.461	.0864

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-33.941	52.096	3.279	0.0000	0.0	.7950	924.93	28.497	633.844	1.938	.222	[illegible]	[illegible]
2	47.847	-35.749	50.062	2.215	0.0000	0.0	.8118	942.04	28.451	633.514	1.937	.221	[illegible]	[illegible]
3	47.037	-31.330	48.274	1.237	0.0000	0.0	.8282	958.54	28.437	633.207	1.935	.221	[illegible]	[illegible]
4	46.498	-29.989	46.849	.351	0.0000	0.0	.8413	971.86	28.415	632.919	1.934	.220	.9399	[illegible]
5	46.089	-26.336	45.748	-.344	0.0000	0.0	.8514	981.63	28.394	632.642	1.932	.220	[illegible]	[illegible]
6	45.757	-23.259	44.879	-.873	0.0000	0.0	.8583	988.36	28.374	632.368	1.931	.219	[illegible]	[illegible]
7	45.459	-20.029	44.100	-1.351	0.0000	0.0	.8621	991.78	28.335	631.836	1.928	.218	[illegible]	[illegible]
8	45.189	-16.839	43.474	-1.715	0.0000	0.0	.8640	993.21	28.297	631.307	1.925	.217	[illegible]	[illegible]
9	44.956	-13.558	42.949	-2.007	0.0000	0.0	.8641	992.99	28.253	630.780	[illegible]	[illegible]	[illegible]	[illegible]
10	44.770	-9.552	43.406	-1.364	0.0000	0.0	.8664	996.82	28.324	632.767	[illegible]	[illegible]	[illegible]	[illegible]
11	44.652	-6.039	43.938	-.713	0.0000	0.0	.8675	999.53	28.391	634.800	1.932	.224	[illegible]	[illegible]
12	44.625	-2.283	44.472	-.156	0.0000	0.0	.8668	1000.22	28.433	636.614	1.935	.227	[illegible]	[illegible]
13	44.726	1.193	44.736	.012	0.0000	0.0	.8612	994.99	28.372	637.175	1.931	[illegible]	[illegible]	[illegible]
14	44.907	4.550	45.059	.165	0.0000	0.0	.8544	988.63	28.304	637.738	1.926	[illegible]	[illegible]	[illegible]
15	45.118	9.374	45.745	.627	0.0000	0.0	.8463	981.27	28.229	638.893	1.921	[illegible]	[illegible]	[illegible]
16	45.314	13.732	47.783	2.469	0.0000	0.0	.8354	973.01	28.120	642.608	1.913	[illegible]	[illegible]	[illegible]
17	45.613	20.548	50.232	4.619	0.0000	0.0	.8217	961.88	28.003	646.577	1.905	[illegible]	[illegible]	[illegible]
18	46.236	28.050	52.400	6.167	0.0000	0.0	.8056	947.24	27.922	649.331	[illegible]	.252	[illegible]	[illegible]
19	47.320	35.318	54.884	7.565	0.0000	0.0	.7852	927.49	27.852	651.672	1.895	[illegible]	[illegible]	[illegible]
20	48.786	41.747	58.492	9.706	0.0000	0.0	.7581	900.73	27.773	654.361	1.890	.262	[illegible]	[illegible]
21	50.914	46.632	64.034	13.220	0.0000	0.0	.7245	866.77	27.673	657.717	1.883	.268	.7388	.7681

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.920 ISEN. EFF.= .881 POLY. EFF.= .892 DELTA T ON T = .232

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7120	975.85	629.11	1161.05	633.844	521.935	28.124	14.236	1.0361	32.81	5.21	-3.688	.0735
2	7.7555	965.35	617.52	1146.43	633.514	524.407	28.100	14.490	1.0206	32.59	4.40	-3.599	.0745
3	7.7956	950.09	604.72	1131.25	633.207	526.972	28.035	14.754	1.0047	32.31	3.64	-3.557	.0755
4	7.8354	945.23	591.55	1115.93	632.919	529.552	28.060	15.019	.9886	32.01	2.96	-3.577	.0765
5	7.8743	936.09	579.19	1100.73	632.642	532.066	28.023	15.277	.9723	31.75	2.40	-3.646	.0774
6	7.9143	925.25	568.14	1085.77	632.355	534.520	27.981	15.522	.9573	31.55	1.95	-3.735	.0783
7	7.9539	913.34	557.02	1070.83	631.836	536.664	27.917	15.751	.9424	31.41	1.63	-3.892	.0791
8	7.9934	903.20	548.43	1056.69	631.307	538.534	27.833	15.965	.9283	31.27	1.44	-4.047	.0799
9	8.0342	893.35	539.52	1043.63	630.780	540.387	27.733	16.163	.9153	31.13	1.36	-4.220	.0806
10	8.0731	888.28	533.95	1036.36	632.707	543.536	27.633	16.345	.9053	31.01	1.35	-4.435	.0811
11	8.1134	883.91	529.37	1030.03	634.800	546.761	27.670	16.511	.8982	30.93	1.39	-4.729	.0814
12	8.1533	878.55	525.59	1023.32	636.614	549.028	27.894	16.563	.8905	30.90	1.46	-5.124	.0817
13	8.2007	870.31	521.92	1015.07	637.179	551.090	27.944	16.801	.8812	30.94	1.56	-5.642	.0821
14	8.2437	862.94	519.06	1007.32	637.738	553.607	27.735	16.923	.8727	31.03	1.67	-6.319	.0824
15	8.2873	855.37	517.39	1000.13	638.383	555.394	27.742	17.029	.8650	31.15	1.78	-7.275	.0826
16	8.3316	850.56	518.30	996.15	642.606	560.303	27.673	17.114	.8551	31.36	1.81	-8.983	.0824
17	8.3737	845.15	522.37	993.55	646.377	564.715	27.611	17.171	.8529	31.72	1.67	-11.240	.0820
18	8.4229	839.72	530.53	993.30	649.331	567.320	27.561	17.186	.8503	32.29	1.31	-13.864	.0817
19	8.4704	835.59	542.57	996.37	651.672	569.362	27.523	17.137	.8515	32.93	.67	35.811	.0812
20	8.5201	834.50	557.65	1003.68	654.361	570.347	27.465	17.009	.8567	33.75	-.38	10.925	.0803
21	8.5730	835.73	575.54	1014.79	657.717	572.353	27.385	16.811	.8650	34.50	-2.03	5.347	.0792

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.847	32.809	.850	.0374	0.0	1.0361	1161.06	28.124	633.844	1.914	.222	.9164	.9237
2	31.733	-23.236	32.591	.857	.0353	0.0	1.0206	1146.45	28.100	633.514	1.912	.221	.9181	.9252
3	31.445	-21.229	32.313	.855	.0341	0.0	1.0047	1131.26	28.035	633.207	1.911	.221	.9194	.9264
4	31.129	-18.834	32.012	.884	.0337	0.0	.9886	1115.93	28.060	632.919	1.909	.220	.9203	.9272
5	30.841	-15.489	31.746	.904	.0341	0.0	.9729	1100.76	28.023	632.642	1.907	.220	.9208	.9276
6	30.629	-14.233	31.551	.925	.0307	0.0	.9575	1085.77	27.981	632.365	1.904	.219	.9203	.9272
7	30.459	-12.132	31.407	.943	.0354	0.0	.9424	1070.83	27.917	631.838	1.900	.218	.9211	.9279
8	30.298	-10.037	31.274	.971	.0407	0.0	.9283	1056.69	27.833	631.307	1.895	.217	.9218	.9285
9	30.133	-7.871	31.129	.991	.0423	0.0	.9153	1043.63	27.733	630.780	1.892	.216	.9238	.9299
10	29.996	-5.705	31.015	1.003	.0443	0.0	.9063	1036.36	27.633	632.707	1.894	.220	.9089	.9167
11	29.900	-3.569	30.925	1.025	.0473	0.0	.8982	1030.05	27.670	634.800	1.896	.224	.8958	.9048
12	29.806	-1.508	30.904	1.033	.0493	0.0	.8905	1023.92	27.894	636.314	1.898	.227	.8825	.8925
13	29.934	.565	30.942	1.045	.0434	0.0	.8812	1015.07	27.944	637.175	1.895	.228	.8756	.8862
14	29.375	2.823	31.027	1.052	.0474	0.0	.8727	1007.02	27.735	637.738	1.891	.230	.8688	.8808
15	30.099	5.437	31.151	1.052	.0461	0.0	.8650	1000.19	27.742	638.383	1.886	.232	.8577	.8698
16	30.309	8.521	31.356	1.045	.0427	0.0	.8551	996.15	27.673	642.699	1.883	.239	.8286	.8431
17	30.575	12.040	31.719	1.044	.0391	0.0	.8526	993.55	27.611	646.377	1.879	.247	.7994	.8183
18	31.243	15.999	32.287	1.044	.0364	0.0	.8503	993.30	27.568	649.331	1.876	.252	.7884	.7988
19	31.946	20.134	32.933	1.048	.0352	0.0	.8515	996.37	27.525	651.672	1.873	.256	.7645	.7858
20	32.595	24.317	33.753	1.059	.0343	0.0	.8567	1003.68	27.456	654.361	1.869	.262	.7469	.7677
21	33.478	28.225	34.499	1.081	.0354	0.0	.8650	1014.79	27.385	657.717	1.863	.269	.7247	.7475

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.832 ISEN. EFF.= .859 POLY. EFF.= .871 DELTA T ON T = .232

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7838	853.63	272.44	901.77	633.844	566.391	27.774	18.717	.7727	17.58	-2.21	-5.186	[illegible]
2	7.7872	[illegible]	[illegible]	885.23	633.514	[illegible]	27.743	[illegible]	.7572	[illegible]	[illegible]	[illegible]	[illegible]
3	7.7921	829.06	[illegible]	869.42	633.207	570.511	27.720	[illegible]	.7423	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	632.919	572.401	27.687	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	574.159	[illegible]	[illegible]	.7147	[illegible]	[illegible]	[illegible]	[illegible]
6	7.9019	[illegible]	[illegible]	825.05	632.368	[illegible]	27.573	19.865	.7011	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	243.10	811.02	[illegible]	577.285	27.494	20.029	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.163	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	785.12	632.767	[illegible]	[illegible]	20.347	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	583.940	[illegible]	20.484	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	636.614	[illegible]	27.353	20.442	[illegible]	17.46	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	779.39	637.175	[illegible]	27.315	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	637.738	587.566	27.281	20.463	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	777.73	[illegible]	[illegible]	27.244	20.449	.6537	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	780.94	[illegible]	[illegible]	[illegible]	[illegible]	.6546	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	595.462	27.193	20.369	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	791.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	757.62	[illegible]	[illegible]	651.672	[illegible]	27.175	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	764.19	[illegible]	807.07	654.361	[illegible]	27.143	20.067	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	8.5795	771.67	269.24	817.48	657.717	602.357	27.103	19.903	.6794	19.23	[illegible]	76.316	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	17.585	1.351	.0734	0.0	.7727	901.77	27.774	633.844	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	1.353	.0712	0.0	.7572	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	1.363	.0696	0.0	.7423	869.42	27.720	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	27.687	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.7147	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	1.446	[illegible]	0.0	[illegible]	[illegible]	27.573	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	.0773	0.0	[illegible]	[illegible]	27.494	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	.0816	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	.0894	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	1.625	.0943	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.6537	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.6546	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	1.667	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	19.229	1.719	.0697	0.0	.6794	817.48	27.105	657.717	[illegible]	[illegible]	[illegible]	[illegible]

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.363 ISEN. EFF.= .836 POLY. EFF.= .850 DELTA T ON T = .232

STATION 14 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	634.71	73.26	638.78	633.844	593.363	27.423	21.757	.5891	6.18	-4.29	18.761	[illegible]
2	7.7597	632.24	73.44	636.12	633.514	593.348	27.384	21.758	.5829	6.66	-4.12	17.953	[illegible]
3	7.7932	689.57	71.77	693.39	633.207	593.367	27.342	21.763	.5806	6.94	-3.96	17.997	[illegible]
4	7.7373	686.95	70.34	690.56	632.913	593.384	27.298	21.766	.5782	6.85	-3.74	19.127	[illegible]
5	7.8276	684.10	69.12	687.59	632.542	593.436	27.230	21.771	.5757	5.77	-3.53	[illegible]	[illegible]
6	7.8935	678.75	67.80	682.13	632.368	593.730	27.156	21.773	.5710	5.70	-3.38	[illegible]	[illegible]
7	7.8103	672.43	65.92	676.11	631.836	593.928	27.053	21.773	.5658	5.65	-3.14	[illegible]	[illegible]
8	7.9540	656.68	63.33	663.81	631.307	594.105	26.946	21.773	.5605	5.50	-2.78	[illegible]	[illegible]
9	7.9944	661.33	64.40	665.05	630.780	594.111	26.884	21.771	.5566	5.56	-2.49	[illegible]	[illegible]
10	8.0437	662.23	64.09	665.32	632.767	596.071	26.846	21.768	.5558	5.53	-2.19	[illegible]	[illegible]
11	8.0838	662.63	63.89	665.76	634.800	598.059	26.823	21.762	.5553	5.51	-1.79	[illegible]	[illegible]
12	8.1360	663.12	63.30	666.18	636.614	599.838	26.809	21.754	.5548	5.48	-1.44	[illegible]	[illegible]
13	8.1846	663.14	63.75	666.19	637.175	600.398	26.790	21.743	.5546	5.49	-1.09	[illegible]	[illegible]
14	8.2332	663.38	63.80	666.56	637.736	600.914	26.773	21.728	.5546	5.47	-.74	[illegible]	[illegible]
15	8.2824	664.35	64.00	667.43	638.083	601.964	26.736	21.710	.5549	5.50	-.41	[illegible]	[illegible]
16	8.3353	669.00	64.75	672.13	642.308	603.174	26.778	21.690	.5573	5.53	-.08	[illegible]	[illegible]
17	8.3827	673.77	65.82	676.97	646.327	608.607	26.743	21.666	.5598	5.59	.21	[illegible]	[illegible]
18	8.4336	679.35	67.32	681.65	649.331	610.586	26.827	21.636	.5626	5.67	.49	[illegible]	[illegible]
19	8.4850	681.40	69.34	684.92	651.672	612.515	26.834	21.622	.5644	5.83	.69	[illegible]	[illegible]
20	8.5371	684.15	72.25	687.93	654.361	615.164	26.834	21.599	.5658	6.03	.85	960.507	[illegible]
21	8.5980	686.64	76.13	698.85	657.717	618.195	26.823	21.976	.5668	6.33	1.06	-618.607	.0941

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	6.193	2.218	.1036	0.0	.5891	695.78	27.423	633.844	1.866	.222	.8775	.8877
2	3.834	-.995	6.056	2.222	.1077	0.0	.5829	696.12	27.384	633.514	1.863	.221	[illegible]	[illegible]
3	3.703	-.923	5.941	2.239	.1063	0.0	.5806	693.39	27.342	633.207	1.861	.221	[illegible]	[illegible]
4	3.576	-.839	5.847	2.271	.1060	0.0	.5782	690.56	27.230	632.913	1.857	.220	[illegible]	[illegible]
5	3.454	-.734	5.769	2.315	.1069	0.0	.5757	687.59	27.230	632.542	1.854	.219	[illegible]	[illegible]
6	3.336	-.638	5.704	2.369	.1125	0.0	.5710	682.15	27.156	632.368	1.848	.219	[illegible]	[illegible]
7	3.218	-.537	5.640	2.423	.1174	0.0	.5658	676.11	27.153	631.836	1.841	.218	.3719	[illegible]
8	3.105	-.519	5.597	2.492	.1243	0.0	.5605	669.87	26.946	631.307	1.834	.217	[illegible]	[illegible]
9	3.001	-.451	5.557	2.559	.1280	0.0	.5566	665.05	26.884	630.780	1.830	.218	[illegible]	[illegible]
10	2.910	-.409	5.527	2.617	.1349	0.0	.5558	665.32	26.846	632.767	1.827	.220	[illegible]	[illegible]
11	2.837	-.355	5.507	2.670	.1420	0.0	.5553	665.76	26.825	634.800	1.826	.224	[illegible]	[illegible]
12	2.783	-.283	5.436	2.712	.1479	0.0	.5548	666.18	26.809	636.614	1.824	.226	[illegible]	[illegible]
13	2.752	-.179	5.491	2.739	.1453	0.0	.5546	666.19	26.770	637.175	1.823	.228	[illegible]	[illegible]
14	2.746	-.141	5.493	2.745	.1426	0.0	.5546	666.56	26.773	637.738	1.822	.230	[illegible]	[illegible]
15	2.763	-.158	5.503	2.734	.1335	0.0	.5549	667.43	26.736	638.083	1.821	.233	[illegible]	[illegible]
16	2.813	-.234	5.529	2.709	.1308	0.0	.5573	672.13	26.778	642.308	1.822	.239	[illegible]	[illegible]
17	2.893	-.427	5.580	2.687	.1201	0.0	.5598	676.97	26.743	646.327	1.824	.247	[illegible]	[illegible]
18	2.987	-.536	5.667	2.680	.1127	0.0	.5626	681.68	26.827	649.331	1.825	.252	[illegible]	[illegible]
19	3.117	-.836	5.811	2.694	.1094	0.0	.5644	684.92	26.834	651.672	1.826	.256	[illegible]	[illegible]
20	3.293	-.975	6.029	2.735	.1068	0.0	.5658	687.95	26.834	654.361	1.826	.262	[illegible]	[illegible]
21	3.508	-1.055	6.326	2.818	.1040	0.0	.5668	690.85	26.823	657.717	1.825	.266	.6985	[illegible]

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.833 ISEN. EFF.= .813 POLY. EFF.= .828 DELTA T ON T = .232

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	626.17	0.00	626.17	633.844	601.345	27.073	22.506	.5208	0.00	-1.66	10.624	.1009
2	7.6794	625.05	0.00	625.05	633.514	601.130	27.019	22.474	.5203	0.00	-1.64	11.037	.1008
3	7.7197	623.81	0.00	623.81	633.207	600.951	26.964	22.443	.5190	0.00	-1.60	11.517	.1007
4	7.7608	622.42	0.00	622.42	632.919	600.305	26.907	22.413	.5180	0.00	-1.56	12.080	.1006
5	7.8026	620.83	0.00	620.83	632.642	600.693	26.849	22.383	.5167	0.00	-1.51	12.745	.1005
6	7.8439	615.37	0.00	615.37	632.368	600.979	26.730	22.355	.5120	0.00	-1.44	13.581	.1003
7	7.8901	609.36	0.00	609.36	631.836	601.056	26.607	22.329	.5070	0.00	-1.35	14.695	.1002
8	7.9336	602.87	0.00	602.87	631.307	601.179	26.481	22.305	.5015	0.00	-1.25	16.222	.1000
9	7.9833	598.30	0.00	598.30	630.780	601.107	26.389	22.283	.4978	0.00	-1.13	18.359	.0999
10	8.0239	598.05	0.00	598.05	632.767	603.121	26.348	22.263	.4967	0.00	-.99	21.441	.0995
11	8.0735	597.53	0.00	597.53	634.800	605.209	26.306	22.247	.4954	0.00	-.84	26.227	.0991
12	8.1280	596.88	0.00	596.88	636.614	607.090	26.268	22.234	.4941	0.00	-.67	34.525	.0987
13	8.1783	597.75	0.00	597.75	637.175	607.565	26.265	22.224	.4947	0.00	-.50	50.848	.0986
14	8.2292	598.34	0.00	598.34	637.738	608.071	26.263	22.218	.4950	0.00	-.33	93.577	.0985
15	8.2809	598.92	0.00	598.92	638.883	609.159	26.260	22.215	.4950	0.00	-.17	489.307	.0983
16	8.3330	604.69	0.00	604.69	642.608	612.314	26.322	22.216	.4985	0.00	-.01	-171.809	.0978
17	8.3835	610.40	0.00	610.40	646.577	615.713	26.354	22.219	.5013	0.00	.13	-80.008	.0973
18	8.4354	615.33	0.00	615.33	649.331	617.971	26.447	22.226	.5050	0.00	.25	-55.347	.0970
19	8.4917	617.91	0.00	617.91	651.672	620.052	26.481	22.235	.5062	0.00	.36	-43.963	.0967
20	8.5455	620.43	0.00	620.43	654.361	622.486	26.513	22.246	.5073	0.00	.45	-37.595	.0964
21	[illegible]	623.15	0.00	623.15	657.717	625.567	26.545	22.258	.5083	0.00	[illegible]	[illegible]	[illegible]

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO
1	-7.239	.020	0.000	7.239	.1457	0.0	.5208
2	-7.394	.020	0.000	7.394	.1441	0.0	.5200
3	-7.559	.019	0.000	7.559	.1437	0.0	.5190
4	-7.727	.018	0.000	7.727	.1430	0.0	.5180
5	-7.896	.016	0.000	7.896	.1443	0.0	.5167
6	-8.063	.013	0.000	8.063	.1518	0.0	.5120
7	-8.229	.011	0.000	8.229	.1535	0.0	.5070
8	-8.391	.010	0.000	8.391	.1664	0.0	.5015
9	-8.545	.008	0.000	8.545	.1716	0.0	.4978
10	-8.685	.007	0.000	8.685	.1802	0.0	.4967
11	-8.808	.005	0.000	8.808	.1894	0.0	.4954
12	-8.911	.003	0.000	8.911	.1970	0.0	.4941
13	-8.992	.001	0.000	8.992	.1935	0.0	.4947
14	-9.045	-.002	0.000	9.045	.1902	0.0	.4950
15	-9.063	-.004	0.000	9.063	.1865	0.0	.4950
16	-9.059	-.008	0.000	9.059	.1742	0.0	.4985
17	-9.061	-.012	0.000	9.061	.1614	0.0	.5018
18	-9.086	-.018	0.000	9.086	.1519	0.0	.5050
19	-9.127	-.024	0.000	9.127	.1474	0.0	.5062
20	-9.170	-.031	0.000	9.170	.1433	0.0	.5073
21	-9.213	-.038	0.000	9.213	.1383	0.0	.5083

LOCAT -ION	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	626.17	27.073	633.344	1.842	.222	.8578	.8695
2	625.05	27.019	633.514	1.839	.221	.8572	.8689
3	623.81	26.954	633.207	1.835	.221	.8564	.8681
4	622.42	26.907	632.919	1.831	.220	.8553	.8671
5	620.83	26.849	632.642	1.827	.220	.8540	.8658
6	615.37	26.730	632.368	1.819	.219	.8492	.8613
7	609.36	26.607	631.836	1.811	.218	.8461	.8584
8	602.87	26.481	631.307	1.802	.217	.8427	.8552
9	598.30	26.389	630.780	1.796	.216	.8412	.8537
10	598.05	26.348	632.767	1.793	.220	.8242	.8380
11	597.53	26.306	634.800	1.790	.224	.8073	.8224
12	596.88	26.268	636.614	1.787	.227	.7927	.8089
13	597.75	26.265	637.175	1.787	.228	.7883	.8053
14	598.34	26.263	637.738	1.787	.230	.7849	.8017
15	598.92	26.260	638.883	1.787	.232	.7773	.7946
16	604.69	26.322	642.608	1.791	.239	.7572	.7761
17	610.40	26.354	646.577	1.795	.247	.7369	.7575
18	615.33	26.447	649.331	1.800	.252	.7245	.7461
19	617.91	26.481	651.672	1.802	.256	.7133	.7359
20	620.43	26.513	654.361	1.804	.262	.7007	.7243
21	623.15	26.545	657.717	1.806	.268	.6853	.7101

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.804 ISEN. EFF.= .790 POLY. EFF.= .806 DELTA T ON T = .232

STATION 16 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	642.97	0.00	642.97	633.844	599.575	27.073	22.274	.5356	0.00	0.00	0.000	.1002
2	7.6797	639.62	0.00	639.62	633.514	599.601	27.019	22.274	.5328	0.00	-.03	1161.533	.1002
3	7.7194	636.20	0.00	636.20	633.207	599.656	26.964	22.274	.5293	0.00	-.05	621.738	.1001
4	7.7591	632.69	0.00	632.69	632.919	599.736	26.907	22.273	.5270	0.00	-.08	446.577	.1001
5	7.8007	629.05	0.00	629.05	632.642	599.841	26.849	22.272	.5233	0.00	-.09	363.485	.1001
6	7.8434	621.65	0.00	621.63	632.368	600.331	26.730	22.271	.5175	0.00	-.11	317.714	.1000
7	7.8874	613.84	0.00	613.84	631.836	600.601	26.607	22.270	.5103	0.00	-.12	291.557	.1000
8	7.9328	605.65	0.00	605.65	631.307	600.901	26.481	22.268	.5040	0.00	-.12	278.151	.0999
9	7.9794	599.51	0.00	599.51	630.780	600.987	26.383	22.267	.4988	0.00	-.13	274.618	.0999
10	8.0271	597.86	0.00	597.86	632.767	603.139	26.343	22.266	.4966	0.00	-.12	280.041	.0995
11	8.0758	596.15	0.00	596.15	634.800	605.345	26.305	22.265	.4942	0.00	-.12	294.723	.0992
12	8.1255	594.55	0.00	594.55	636.614	607.320	26.263	22.263	.4921	0.00	-.11	320.356	.0988
13	8.1761	594.73	0.00	594.73	637.175	607.853	26.265	22.262	.4921	0.00	-.10	360.229	.0987
14	8.2273	594.91	0.00	594.91	637.738	608.410	26.263	22.261	.4920	0.00	-.08	420.263	.0987
15	8.2793	595.34	0.00	595.34	638.883	609.513	26.260	22.260	.4919	0.00	-.07	511.868	.0985
16	8.3317	601.23	0.00	601.23	642.608	612.500	26.322	22.260	.4955	0.00	-.05	655.935	.0980
17	8.3846	607.29	0.00	607.29	646.577	616.027	26.384	22.259	.4991	0.00	-.04	895.460	.0974
18	8.4378	612.78	0.00	612.78	649.331	618.230	26.447	22.259	.5028	0.00	-.03	1337.047	.0971
19	8.4914	616.07	0.00	616.07	651.672	620.240	26.481	22.258	.5047	0.00	-.02	2318.463	.0968
20	8.5454	619.45	0.00	619.45	654.361	622.587	26.513	22.258	.5065	0.00	-.01	5606.642	.0964
21	8.6000	623.15	0.00	623.15	657.717	625.567	26.543	22.258	.5083	0.00	0.00	0.000	.0959

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	644.11	0.00	644.11	633.844	599.454	27.073	22.258	.5366	0.00	0.00	0.000	.1001
2	7.6787	640.75	0.00	640.75	633.514	599.481	27.013	22.258	.5333	0.00	-.00	0.000	.1001
3	7.7183	637.31	0.00	637.31	633.207	599.539	26.964	22.258	.5303	0.00	-.00	0.000	.1001
4	7.7590	633.76	0.00	633.76	632.919	599.624	26.907	22.258	.5274	0.00	-.00	0.000	.1001
5	7.8006	630.06	0.00	630.06	632.642	599.736	26.849	22.258	.5243	0.00	-.00	0.000	.1001
6	7.8433	622.62	0.00	622.62	632.368	600.234	26.730	22.258	.5184	0.00	-.00	0.000	.1000
7	7.8873	614.71	0.00	614.71	631.836	600.513	26.607	22.258	.5117	0.00	-.01	0.000	.0999
8	7.9326	606.43	0.00	606.43	631.307	600.822	26.481	22.258	.5046	0.00	-.01	0.000	.0999
9	7.9792	600.20	0.00	600.20	630.780	600.919	26.383	22.258	.4994	0.00	-.01	0.000	.0999
10	8.0259	598.45	0.00	598.45	632.767	603.081	26.345	22.258	.4971	0.00	-.01	0.000	.0995
11	8.0756	596.64	0.00	596.64	634.800	605.297	26.306	22.258	.4947	0.00	-.01	0.000	.0991
12	8.1253	594.94	0.00	594.94	636.614	607.281	26.264	22.258	.4925	0.00	-.01	0.000	.0988
13	8.1759	595.04	0.00	595.04	637.175	607.833	26.265	22.258	.4923	0.00	-.01	0.000	.0987
14	8.2271	595.14	0.00	595.14	637.738	608.388	26.263	22.258	.4922	0.00	-.01	0.000	.0986
15	8.2791	595.50	0.00	595.50	638.883	609.497	26.260	22.258	.4920	0.00	-.01	0.000	.0985
16	8.3316	601.34	0.00	601.34	642.608	612.649	26.322	22.258	.4956	0.00	-.01	0.000	.0980
17	8.3845	607.36	0.00	607.36	646.577	616.020	26.384	22.258	.4992	0.00	-.00	0.000	.0974
18	8.4377	612.81	0.00	612.81	649.331	618.227	26.447	22.258	.5028	0.00	-.00	0.000	.0971
19	8.4913	616.08	0.00	616.08	651.672	620.238	26.481	22.258	.5047	0.00	-.00	0.000	.0968
20	8.5454	619.45	0.00	619.45	654.361	622.587	26.513	22.258	.5065	0.00	-.00	0.000	.0964
21	8.6000	623.15	0.00	623.15	657.717	625.567	26.543	22.258	.5083	0.00	0.00	0.000	.0959

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	.8973	9.102	5.636	.1252	.4402	.4311	.5583	.7277	.7823	-60.937	-12.647	[illegible]	[illegible]
2	6.8621	7.5916	.9205	9.836	6.048	.1197	.4567	.4564	.5623	.7113	.7719	-61.337	-13.483	[illegible]	[illegible]
3	6.9733	7.6344	.9333	9.599	6.359	.1127	.4700	.4786	.5625	.6978	.7608	-61.714	-14.333	[illegible]	[illegible]
4	7.0839	7.6782	.9459	8.402	6.539	.1073	.4808	.4863	.5599	.6863	.7503	-62.056	-15.163	[illegible]	[illegible]
5	7.1937	7.7229	.9532	8.252	6.562	.1021	.4894	.4959	.5552	.6781	.7398	-62.362	-16.006	[illegible]	[illegible]
6	7.3031	7.7684	.9705	8.135	7.050	.0973	.4962	.5019	.5488	.6703	.7284	-62.639	-16.849	[illegible]	[illegible]
7	7.4121	7.8147	.9825	8.039	7.321	.0907	.4999	.5047	.5413	.6664	.7174	-62.906	-17.653	[illegible]	[illegible]
8	7.5209	7.8619	.9945	7.957	7.679	.0844	.5024	.5063	.5327	.6623	.7055	-63.174	-18.389	[illegible]	[illegible]
9	7.6294	7.9099	.9062	7.837	8.039	.0784	.5039	.5070	.5235	.6605	.6937	-63.448	-19.054	[illegible]	[illegible]
10	7.7381	7.9593	.9132	7.827	7.630	.0971	.5232	.5256	.5137	.6433	.6974	-63.733	-19.656	[illegible]	[illegible]
11	7.8471	8.0085	.9299	7.774	7.247	.1150	.5416	.5434	.5038	.6280	.7010	-64.034	-20.216	[illegible]	[illegible]
12	7.9566	8.0604	.9413	7.724	7.092	.1308	.5578	.5590	.4937	.6136	.7029	-64.355	-20.734	[illegible]	[illegible]
13	8.0668	8.1137	.9527	7.672	7.319	.1394	.5669	.5674	.4835	.6043	.6970	-64.699	-21.215	[illegible]	[illegible]
14	8.1779	8.1685	.9541	7.614	8.004	.1477	.5751	.5750	.4732	.5955	.6909	-65.072	-21.659	[illegible]	[illegible]
15	8.2902	8.2250	.9754	7.543	8.493	.1625	.5883	.5877	.4628	.5824	.6880	-65.476	-22.037	[illegible]	[illegible]
16	8.4039	8.2846	.9365	7.471	8.937	.2062	.6269	.6257	.4527	.5471	.6943	-65.911	-22.389	[illegible]	[illegible]
17	8.5191	8.3432	.9962	7.384	9.738	.2436	.6682	.6565	.4432	.5087	.7106	-66.373	-22.624	[illegible]	[illegible]
18	8.6362	8.4196	1.0035	7.233	11.373	.2761	.6951	.6929	.4343	.4825	.7138	-66.852	-22.716	[illegible]	[illegible]
19	8.7552	8.4934	1.0215	7.207	12.336	.2964	.7165	.7139	.4263	.4603	.7139	-67.337	-22.570	[illegible]	[illegible]
20	8.8754	8.5777	1.0335	7.127	15.599	.3191	.7416	.7387	.4193	.4356	.7143	-67.824	-22.135	[illegible]	[illegible]
21	9.0000	8.6639	1.0455	7.052	19.749	.3473	.7753	.7722	.4139	.4017	.7166	-68.316	-21.371	-9.687	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6133	7.6400	.7350	3.279	7.239	.1457	.4872	.4970	.3836	.6770	0.0000	48.817	-7.239	[illegible]	[illegible]
2	7.6770	7.6794	.8119	2.219	7.394	.1441	.5044	.5043	.4017	.6635	0.0000	47.847	-7.394	[illegible]	[illegible]
3	7.7304	7.7197	.8282	1.237	7.559	.1430	.5203	.5204	.4181	.6508	0.0000	47.037	-7.559	[illegible]	[illegible]
4	7.7800	7.7609	.8415	.351	7.727	.1410	.5336	.5138	.4305	.6404	0.0000	46.498	-7.727	[illegible]	[illegible]
5	7.8268	7.8023	.8514	-.344	7.836	.1443	.5442	.5445	.4390	.6324	0.0000	46.089	-7.836	[illegible]	[illegible]
6	7.8717	7.8459	.8593	-.678	8.053	.1518	.5565	.5568	.4445	.6225	0.0000	45.757	-8.063	[illegible]	[illegible]
7	7.9153	7.8901	.8621	-1.351	8.229	.1586	.5667	.5670	.4495	.6144	0.0000	45.459	-8.229	[illegible]	[illegible]
8	7.9591	7.9356	.8640	-1.715	8.331	.1664	.5759	.5762	.4507	.6070	0.0000	45.189	-8.391	[illegible]	[illegible]
9	8.0004	7.9823	.8641	-2.007	8.545	.1716	.5818	.5820	.4515	.6025	0.0000	44.956	-8.545	[illegible]	[illegible]
10	8.0425	8.0299	.8604	-1.364	8.635	.1802	.5856	.5888	.4472	.6000	0.0000	44.770	-8.685	[illegible]	[illegible]
11	8.0849	8.0785	.8575	-.713	8.806	.1894	.5946	.5947	.4420	.5975	0.0000	44.652	-8.808	[illegible]	[illegible]
12	8.1277	8.1280	.8565	-.158	8.911	.1970	.5988	.5986	.4367	.5968	0.0000	44.629	-8.911	[illegible]	[illegible]
13	8.1710	8.1783	.8512	.012	8.992	.1935	.5963	.5962	.4352	.6008	0.0000	44.723	-8.995	[illegible]	[illegible]
14	8.2148	8.2292	.8544	.192	9.045	.1902	.5925	.5929	.4331	.6052	0.0000	44.907	-9.045	[illegible]	[illegible]
15	8.2595	8.2808	.8403	.627	9.063	.1865	.5889	.5887	.4304	.6104	0.0000	45.118	-9.063	[illegible]	[illegible]
16	8.3059	8.3330	.8354	2.469	9.039	.1742	.5827	.5824	.4278	.6215	0.0000	45.314	-9.059	[illegible]	[illegible]
17	8.3555	8.3855	.8217	4.619	9.061	.1614	.5742	.5738	.4231	.6345	0.0000	45.613	-9.061	[illegible]	[illegible]
18	8.4091	8.4384	.8033	6.167	9.036	.1519	.5609	.5505	.4131	.6496	0.0000	46.234	-9.036	[illegible]	[illegible]
19	8.4675	8.4917	.7952	7.565	9.127	.1474	.5443	.5440	.3965	.6662	0.0000	47.320	-9.127	[illegible]	[illegible]
20	8.5355	8.5456	.7531	9.706	9.170	.1433	.5211	.5210	.3714	.6868	0.0000	48.786	-9.178	[illegible]	[illegible]
21	8.6199	8.6000	.7245	13.220	9.213	.1383	.4895	.4498	.3361	.7163	0.0000	50.814	-9.213	46.652	[illegible]

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	4.3	3.0	11.0	13.0	14.0	14.7	15.8	15.8
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	4.4	3.0	11.0	13.0	14.0	14.7	15.8	15.8

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 19

TEST POINT TITLE = 212070015970

FLOW = 17.27 SPEED = 14291.3 PRESSURE RATIO = 1.804 ISENTROPIC EFFY = .7895 POLYTROPIC EFFY = .8082 DEL T/T = .2322

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	----ROTOR---- ISEN EFFY	----STAGE---- PRESSURE RATIO	----STAGE---- ISEN EFFY	FLOW/(CHOKE FLOW)
1	212070015970	CONVERGED AFTER 18 PASSES	17.270	14291.3	1.920	.881	1.804	.798	.45226

5. TEST POINT 212071515980 (80%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0685	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	20.93	0.000	.0742
2	6.2256	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	19.71	0.000	.0742
3	6.3837	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	18.48	0.000	.0742
4	6.5333	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	17.23	0.000	.0742
5	6.6933	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	15.98	0.000	.0742
6	6.8473	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	14.72	0.000	.0742
7	6.9935	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	13.47	0.000	.0742
8	7.1515	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	12.23	0.000	.0742
9	7.3026	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	11.01	0.000	.0742
10	7.4531	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	9.80	0.000	.0742
11	7.6030	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	8.62	0.000	.0742
12	7.7525	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	7.47	0.000	.0742
13	7.9017	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	6.36	0.000	.0742
14	8.0506	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	5.30	0.000	.0742
15	8.1933	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	4.29	0.000	.0742
16	8.3473	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	3.35	0.000	.0742
17	8.4953	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	2.49	0.000	.0742
18	8.6447	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	1.71	0.000	.0742
19	8.7931	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	1.02	0.000	.0742
20	8.9415	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	.45	0.000	.0742
21	9.0900	270.32	0.00	270.32	518.688	512.610	14.695	14.102	.2434	0.00	0.00	0.000	.0742

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	294.43	0.00	294.43	518.688	511.477	14.695	13.994	.2654	0.00	20.83	-205.758	.0738
2	6.5135	295.98	0.00	295.98	518.688	511.401	14.695	13.986	.2668	0.00	19.53	-115.511	.0737
3	6.6510	297.35	0.00	297.35	518.688	511.334	14.695	13.980	.2681	0.00	18.22	-84.074	.0737
4	6.7974	298.52	0.00	298.52	518.688	511.276	14.695	13.974	.2691	0.00	16.92	-67.322	.0737
5	6.9229	299.51	0.00	299.51	518.688	511.226	14.695	13.970	.2700	0.00	15.62	-57.670	.0737
6	7.0575	300.31	0.00	300.31	518.688	511.186	14.695	13.966	.2709	0.00	14.32	-50.357	.0737
7	7.1915	300.91	0.00	300.91	518.688	511.156	14.695	13.963	.2713	0.00	13.02	-45.121	.0737
8	7.3250	301.30	0.00	301.30	518.688	511.137	14.695	13.961	.2717	0.00	11.73	-40.783	.0736
9	7.4582	301.47	0.00	301.47	518.688	511.128	14.695	13.960	.2718	0.00	10.46	-36.940	.0736
10	7.5912	301.41	0.00	301.41	518.688	511.132	14.695	13.961	.2719	0.00	9.20	-33.626	.0736
11	7.7243	301.10	0.00	301.10	518.688	511.147	14.695	13.962	.2715	0.00	7.96	-30.639	.0736
12	7.8574	300.52	0.00	300.52	518.688	511.176	14.695	13.965	.2710	0.00	6.75	-27.907	.0737
13	7.9909	299.68	0.00	299.68	518.688	511.218	14.695	13.969	.2702	0.00	5.57	-25.303	.0737
14	8.1243	298.55	0.00	298.55	518.688	511.274	14.695	13.974	.2692	0.00	4.43	-23.038	.0737
15	8.2593	297.12	0.00	297.12	518.688	511.345	14.695	13.981	.2679	0.00	3.33	-20.856	.0737
16	8.3947	295.37	0.00	295.37	518.688	511.431	14.695	13.989	.2663	0.00	2.29	-18.821	.0737
17	8.5310	293.29	0.00	293.29	518.688	511.533	14.695	13.999	.2644	0.00	1.30	-16.922	.0738
18	8.6685	290.85	0.00	290.85	518.688	511.651	14.695	14.010	.2621	0.00	.38	-15.147	.0738
19	8.8074	288.04	0.00	288.04	518.688	511.787	14.695	14.023	.2596	0.00	-.46	-13.491	.0739
20	8.9479	284.81	0.00	284.81	518.688	511.941	14.695	14.038	.2565	0.00	-1.23	-11.948	.0739
21	9.0930	281.10	0.00	281.10	518.688	512.115	14.695	14.055	.2532	0.00	-1.91	-10.518	.0740

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	324.10	0.00	324.10	518.688	509.951	14.695	13.848	.2926	0.00	20.34	-83.831	.0722
2	6.7241	326.20	0.00	326.20	518.688	509.837	14.695	13.837	.2945	0.00	19.16	[illegible]	[illegible]
3	6.8436	328.16	0.00	328.16	518.688	509.730	14.695	13.827	.2963	0.00	17.77	[illegible]	[illegible]
4	6.9634	329.34	0.00	329.34	518.688	509.633	14.695	13.818	.2979	0.00	16.38	[illegible]	[illegible]
5	7.0853	331.50	0.00	331.50	518.688	509.547	14.695	13.810	.2994	0.00	14.99	[illegible]	[illegible]
6	7.2050	332.73	0.00	332.73	518.688	509.476	14.695	13.803	.3006	0.00	13.60	[illegible]	[illegible]
7	7.3252	333.81	0.00	333.81	518.688	509.420	14.695	13.798	.3015	0.00	12.21	[illegible]	[illegible]
8	7.4441	334.50	0.00	334.50	518.688	509.381	14.695	13.794	.3021	0.00	10.82	[illegible]	[illegible]
9	7.5633	334.84	0.00	334.84	518.688	509.362	14.695	13.792	.3024	0.00	9.43	-30.750	[illegible]
10	7.6819	334.79	0.00	334.79	518.688	509.365	14.695	13.793	.3024	0.00	8.05	[illegible]	[illegible]
11	7.8011	334.34	0.00	334.34	518.688	509.390	14.695	13.795	.3020	0.00	6.68	[illegible]	[illegible]
12	7.9237	333.44	0.00	333.44	518.688	509.440	14.695	13.800	.3012	0.00	5.32	[illegible]	[illegible]
13	8.0410	332.09	0.00	332.09	518.688	509.515	14.695	13.807	.2993	0.00	3.99	[illegible]	[illegible]
14	8.1620	330.28	0.00	330.25	518.688	509.614	14.695	13.816	.2982	0.00	2.68	[illegible]	[illegible]
15	8.2842	327.99	0.00	327.99	518.688	509.739	14.695	13.828	.2961	0.00	1.48	-14.787	[illegible]
16	8.4073	325.24	0.00	325.24	518.688	509.889	14.695	13.842	.2936	0.00	.16	[illegible]	[illegible]
17	8.5323	322.02	0.00	322.02	518.688	510.062	14.695	13.859	.2907	0.00	-1.05	[illegible]	[illegible]
18	8.6537	318.34	0.00	318.34	518.688	510.258	14.695	13.877	.2873	0.00	-2.21	[illegible]	[illegible]
19	8.7839	314.19	0.00	314.19	518.688	510.477	14.695	13.898	.2835	0.00	-3.33	-10.381	[illegible]
20	8.9173	309.55	0.00	309.56	518.688	510.717	14.695	13.921	.2792	0.00	-4.42	[illegible]	[illegible]
21	9.0500	304.40	0.00	304.40	518.688	510.980	14.695	13.946	.2745	0.00	-5.47	-8.690	.0736

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	355.84	0.00	355.84	518.688	508.156	14.695	13.678	.3218	0.00	20.32	-388.854	.0726
2	6.8612	359.06	0.00	359.06	518.688	507.963	14.695	13.660	.3249	0.00	18.88	-135.386	[illegible]
3	[illegible]	361.90	0.00	361.90	518.688	507.793	14.695	13.644	.3274	0.00	17.44	-102.964	[illegible]
4	7.0822	364.39	0.00	364.39	518.688	507.643	14.695	13.630	.3297	0.00	16.01	-90.796	[illegible]
5	7.1916	366.38	0.00	366.39	518.688	507.510	14.695	13.618	.3317	0.00	14.58	-81.538	[illegible]
6	7.3035	368.47	0.00	368.47	518.688	507.394	14.695	13.607	.3333	0.00	13.12	-70.871	[illegible]
7	7.4032	370.02	0.00	370.02	518.688	507.299	14.695	13.598	.3349	0.00	11.65	-56.967	[illegible]
8	7.5170	371.16	0.00	371.13	518.688	507.226	14.695	13.591	.3360	0.00	10.15	-44.085	[illegible]
9	7.6250	371.35	0.00	371.50	518.688	507.186	14.695	13.587	.3369	0.00	8.63	-35.030	[illegible]
10	7.7340	372.00	0.00	372.00	518.688	507.177	14.695	13.586	.3367	0.00	7.09	-27.803	[illegible]
11	7.8435	371.54	0.00	371.54	518.688	507.205	14.695	13.589	.3363	0.00	5.56	-22.879	[illegible]
12	7.9531	370.48	0.00	370.43	518.688	507.271	14.695	13.595	.3353	0.00	4.03	-19.448	[illegible]
13	8.0533	368.91	0.00	368.82	518.688	507.373	14.695	13.605	.3339	0.00	2.52	-16.863	[illegible]
14	8.1740	366.33	0.00	366.33	518.688	507.513	14.695	13.618	.3317	0.00	1.03	-14.793	[illegible]
15	8.2872	363.63	0.00	363.63	518.688	507.689	14.695	13.635	.3290	0.00	-.44	-13.899	[illegible]
16	8.4011	360.11	0.00	360.11	518.688	507.901	14.695	13.654	.3257	0.00	-1.88	-11.859	[illegible]
17	8.5155	356.07	0.00	356.07	518.688	508.142	14.695	13.677	.3223	0.00	-3.25	-11.123	[illegible]
18	8.6344	351.63	0.00	351.63	518.688	508.403	14.695	13.702	.3179	0.00	-4.55	-10.749	[illegible]
19	8.7540	346.37	0.00	346.87	518.688	508.680	14.695	13.728	.3135	0.00	-5.81	-10.921	[illegible]
20	8.8729	341.94	0.00	341.94	518.688	508.968	14.695	13.755	.3089	0.00	-7.04	-10.336	[illegible]
21	9.0000	336.59	0.00	336.59	518.688	509.264	14.695	13.783	.3041	0.00	-8.25	-10.317	.0730

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	5.370	-67.331	8.753	0.0000	961.5	.9271	1025.21	23.835	595.447	1.000	0.000	1.0000	1.0000
2	-61.347	5.231	-69.327	8.479	0.0000	977.4	.9418	1041.24	24.196	598.043	1.000	0.000	1.0000	1.0000
3	-61.731	5.317	-69.976	8.247	0.0000	993.1	.9562	1057.01	24.564	600.519	1.000	0.000	1.0000	1.0000
4	-62.077	5.420	-70.140	8.063	0.0000	1008.9	.9704	1072.54	24.939	603.220	1.000	0.000	1.0000	1.0000
5	-62.381	5.325	-70.310	7.923	0.0000	1024.4	.9845	1087.93	25.322	605.848	1.000	0.000	1.0000	1.0000
6	-62.657	5.045	-70.433	7.832	0.0000	1039.3	.9984	1103.24	25.714	608.504	1.000	0.000	1.0000	1.0000
7	-62.921	5.575	-70.579	7.757	0.0000	1055.4	1.0122	1118.35	26.114	611.192	1.000	0.000	1.0000	1.0000
8	-63.156	4.927	-70.832	7.675	0.0000	1070.6	1.0258	1133.32	26.525	613.915	1.000	0.000	1.0000	1.0000
9	-63.430	4.030	-71.102	7.647	0.0000	1085.3	1.0393	1148.15	26.940	616.377	1.000	0.000	1.0000	1.0000
10	-63.737	3.035	-71.343	7.586	0.0000	1101.7	1.0526	1162.93	27.379	619.481	1.000	0.000	1.0000	1.0000
11	-64.335	1.332	-71.592	7.571	0.0000	1117.2	1.0657	1177.40	27.824	622.335	1.000	0.000	1.0000	1.0000
12	-64.353	.226	-71.830	7.534	0.0000	1132.5	1.0798	1191.08	28.284	625.243	1.000	0.000	1.0000	1.0000
13	-64.695	-.917	-72.197	7.563	0.0000	1148.7	1.0917	1206.31	28.758	628.213	1.000	0.000	1.0000	1.0000
14	-65.055	-2.035	-72.527	7.462	0.0000	1164.4	1.1046	1220.73	29.249	631.258	1.000	0.000	1.0000	1.0000
15	-65.407	-3.079	-72.873	7.412	0.0000	1180.4	1.1175	1235.17	29.759	634.363	1.000	0.000	1.0000	1.0000
16	-65.701	-5.207	-73.252	7.351	0.0000	1199.7	1.1304	1249.67	30.283	637.559	1.000	0.000	1.0000	1.0000
17	-66.353	-6.339	-73.643	7.279	0.0000	1213.1	1.1433	1264.32	30.842	640.847	1.000	0.000	1.0000	1.0000
18	-66.843	-7.050	-74.141	7.262	0.0000	1229.9	1.1565	1279.16	31.419	644.233	1.000	0.000	1.0000	1.0000
19	-67.329	-7.703	-74.434	7.125	0.0000	1246.9	1.1698	1294.27	32.021	647.726	1.000	0.000	1.0000	1.0000
20	-67.420	-4.576	-74.370	7.059	0.0000	1264.3	1.1834	1309.66	32.653	651.333	1.000	0.000	1.0000	1.0000
21	-68.316	-4.607	-75.255	6.973	0.0000	1282.0	1.1973	1325.42	33.315	655.060	1.000	0.000	1.0000	1.0000

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8379	402.42	157.03	431.39	544.393	528.839	17.301	15.636	.3830	21.32	22.32	6.139	.0797
2	6.9976	403.31	155.15	431.05	543.904	528.457	17.245	15.593	.3823	20.67	20.72	6.416	.0796
3	7.0973	404.33	147.55	430.43	543.498	528.096	17.191	15.551	.3819	20.05	19.06	6.984	.0794
4	7.1350	405.02	143.57	430.29	543.199	527.708	17.155	15.514	.3818	19.49	17.38	8.056	.0793
5	7.2945	407.21	140.15	430.94	542.900	527.462	17.124	15.482	.3823	18.99	15.63	9.999	.0791
6	7.3925	408.92	137.25	431.34	542.722	527.254	17.101	15.455	.3830	18.55	13.81	13.065	.0790
7	7.4331	410.49	135.05	432.13	542.646	527.123	17.057	15.437	.3837	18.21	11.93	24.180	.0790
8	7.5873	411.03	133.35	432.75	542.601	527.031	17.042	15.428	.3843	17.95	9.99	114.590	.0789
9	7.6544	412.44	132.15	433.11	542.749	527.154	17.055	15.428	.3849	17.77	8.00	-39.086	.0789
10	7.7314	412.12	132.58	432.92	543.125	527.544	17.036	15.440	.3843	17.83	5.98	-16.458	.0789
11	7.8733	410.79	134.12	432.13	543.719	528.194	17.113	15.463	.3833	18.06	3.95	-10.394	.0789
12	7.9771	408.77	135.95	430.73	544.375	528.947	17.137	15.497	.3813	18.40	1.94	-7.626	.0790
13	8.0752	405.25	137.95	429.91	545.002	529.709	17.170	15.542	.3793	18.71	-.04	-6.080	.0791
14	8.1754	403.10	143.24	426.47	545.654	530.535	17.211	15.598	.3773	19.06	-1.99	-5.125	.0793
15	8.2773	399.31	141.11	423.51	546.354	531.445	17.255	15.662	.3745	19.46	-3.87	-4.515	.0795
16	8.3613	393.69	147.02	420.03	547.075	533.006	17.335	15.734	.3718	20.34	-5.63	-4.142	.0796
17	8.4693	387.70	151.90	416.40	549.221	534.310	17.355	15.810	.3671	21.40	-7.19	-3.981	.0797
18	8.5330	381.54	155.30	412.53	550.624	536.479	17.403	15.887	.3631	22.35	-8.47	-4.088	.0798
19	8.7055	375.79	153.32	408.29	551.595	537.743	17.443	15.957	.3590	23.01	-9.39	-4.704	.0800
20	8.8135	369.57	161.74	403.41	552.467	538.941	17.451	16.010	.3543	23.64	-9.81	-7.096	.0801
21	8.9349	362.31	153.39	397.44	553.298	540.130	17.435	16.029	.3487	24.27	-9.36	-1665.883	.0802

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-54.348	4.232	-64.811	5.862	.0133	982.5	.8161	918.33	24.175	[illegible]	1.177	.049	[illegible]	[illegible]
2	[illegible]	4.215	-64.673	5.041	.0142	996.8	.8301	935.97	24.518	[illegible]	1.176	[illegible]	[illegible]	[illegible]
3	[illegible]	4.077	-64.704	5.019	.0144	1010.9	.8457	953.31	24.833	[illegible]	1.178	[illegible]	[illegible]	[illegible]
4	[illegible]	3.728	[illegible]	4.997	.0146	1025.0	.8611	970.28	25.172	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	3.245	[illegible]	4.977	.0148	1039.0	.8760	986.84	25.519	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	2.638	-65.337	4.961	.0149	1053.0	.8904	1002.90	25.876	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-61.275	2.536	-66.226	4.951	.0153	1066.9	.9042	1018.25	26.228	[illegible]	1.163	[illegible]	[illegible]	[illegible]
8	-61.561	2.248	-66.512	4.950	.0158	1080.7	.9172	1032.95	26.591	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	-61.841	1.877	-66.302	4.960	.0182	1094.6	.9297	1047.03	26.951	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	-62.120	1.452	-67.104	4.984	.0196	1108.4	[illegible]	1059.27	27.233	[illegible]	1.163	[illegible]	[illegible]	[illegible]
11	[illegible]	1.007	-67.457	5.023	.0248	1122.3	[illegible]	1070.14	27.619	[illegible]	1.164	[illegible]	[illegible]	[illegible]
12	-62.696	.597	-67.773	5.077	.0297	1136.3	.9579	1080.62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	-63.004	.113	-68.144	5.140	.0332	1150.4	.9666	1091.26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	-63.336	-.334	-68.350	5.204	.0361	1164.7	.9752	1101.80	[illegible]	[illegible]	1.171	[illegible]	[illegible]	[illegible]
15	-63.618	-.931	-68.339	5.261	.0389	1179.1	.9836	1112.17	29.090	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	-1.448	-69.398	5.302	.0454	1193.8	.9885	1119.40	29.391	[illegible]	1.177	[illegible]	[illegible]	[illegible]
17	-64.332	-1.734	[illegible]	[illegible]	.0538	1208.9	.9925	1125.84	29.671	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	-65.084	-1.819	-70.331	5.327	.0633	1224.3	.9978	1133.54	29.936	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	-1.959	-70.921	5.307	.0746	1240.0	1.0057	1143.89	30.418	[illegible]	1.187	[illegible]	[illegible]	[illegible]
20	[illegible]	-2.438	-71.341	5.267	.0809	1256.1	1.0144	1155.89	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	-66.694	-3.111	-71.911	5.217	.0902	1272.6	1.0236	1166.85	31.198	[illegible]	1.186	.067	.7507	[illegible]

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.172 ISEN. EFF.= .884 POLY. EFF.= .886 DELTA T ON T = .053

STATION 6 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	443.28	320.63	546.97	572.489	547.555	20.513	17.568	.4766	[illegible]	[illegible]	[illegible]	[illegible]
2	7.1642	447.15	316.91	543.07	572.442	[illegible]	20.507	[illegible]	.4779	[illegible]	[illegible]	[illegible]	[illegible]
3	7.2530	451.12	313.51	[illegible]	572.496	[illegible]	20.503	17.527	.4787	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	455.15	310.32	[illegible]	572.562	[illegible]	20.503	17.511	.4801	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	459.30	307.23	[illegible]	[illegible]	[illegible]	20.503	17.494	.4817	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	463.95	[illegible]	[illegible]	[illegible]	[illegible]	20.503	17.474	.4834	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	467.75	301.56	556.53	572.793	[illegible]	20.502	17.454	.4851	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	471.47	[illegible]	[illegible]	[illegible]	[illegible]	20.497	17.432	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.462	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	475.50	294.76	559.45	[illegible]	[illegible]	20.452	17.384	.4876	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	558.39	[illegible]	[illegible]	[illegible]	17.356	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	471.79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.327	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	8.0627	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.296	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	545.03	[illegible]	[illegible]	[illegible]	17.265	.4742	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20.007	17.235	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	8.3222	443.97	[illegible]	525.07	[illegible]	[illegible]	[illegible]	17.208	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	512.60	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.175	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	380.90	276.19	[illegible]	[illegible]	[illegible]	19.240	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	8.7375	348.53	[illegible]	[illegible]	574.329	558.231	18.973	[illegible]	.3799	[illegible]	[illegible]	[illegible]	[illegible]
21	9.0673	303.80	263.04	401.24	573.914	[illegible]	18.660	[illegible]	.3456	[illegible]	-3.38	[illegible]	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.305	2.438	-57.230	4.635	.0281	1008.3	.7129	818.14	24.640	603.138	1.396	.104	.9658	.9656
2	-53.065	2.235	-57.562	4.497	.0287	1020.5	.7264	833.64	24.923	605.187	1.395	.104	.9634	.9651
3	-53.599	1.906	-57.996	4.297	.0291	1032.5	.7397	848.84	25.209	607.242	1.395	.104	.9628	.9637
4	-54.099	1.249	-59.233	4.102	.0293	1044.5	.7528	863.81	25.498	609.295	1.395	.104	.9607	.9625
5	-54.562	.494	-59.473	3.916	.0297	1056.2	.7658	878.55	25.790	611.347	1.395	.104	.9595	.9613
6	-54.988	-.085	-59.736	3.743	.0299	1067.9	.7787	893.36	26.035	613.398	1.395	.104	.9584	.9603
7	-55.377	-.237	-59.981	3.604	.0306	1079.4	.7913	907.68	26.375	615.452	1.395	.104	.9565	.9595
8	-55.737	-.319	-59.230	3.503	.0316	1090.9	.8036	921.75	26.667	617.512	1.395	.104	.9542	.9563
9	-56.074	-.236	-59.522	3.443	.0324	1102.3	.8159	935.79	26.962	619.582	1.394	.104	.9520	.9542
10	-56.393	-.216	-59.393	3.465	.0391	1113.7	.8253	946.94	27.191	621.672	1.392	.105	.9412	.9439
11	-56.599	-.078	-60.257	3.569	.0495	1125.1	.8330	955.27	27.330	623.797	1.388	.106	.9247	.9281
12	-56.936	.135	-60.794	3.703	.0593	1136.7	.8409	965.97	27.529	625.969	1.384	.107	.9084	.9125
13	-57.291	.499	-61.390	4.065	.0603	1148.5	.8504	977.22	27.731	628.196	1.378	.107	.8954	.9001
14	-57.592	.905	-62.054	4.461	.0723	1160.5	.8606	993.13	27.936	630.489	1.370	.107	.8833	.8884
15	-57.910	1.395	-62.555	4.956	.0780	1172.7	.8709	1001.42	28.254	632.961	1.361	.106	.8707	.8763
16	-58.292	1.929	-63.424	5.502	.0973	1185.4	.8740	1006.43	28.302	635.341	1.351	.107	.8372	.8448
17	-58.673	2.533	-64.332	6.319	.1204	1198.9	.8748	1009.31	28.292	637.374	1.339	.109	.7973	.8055
18	-59.105	3.335	-65.432	7.265	.1395	1212.9	.8778	1014.59	28.351	640.301	1.325	.110	.7619	.7712
19	-59.709	4.158	-66.191	8.423	.1504	1228.1	.8861	1025.27	28.605	643.366	1.309	.109	.7360	.7458
20	-60.532	4.632	-70.341	9.803	.1620	1244.6	.8941	1036.00	28.855	647.244	1.291	.107	.7060	.7165
21	-61.549	4.919	-73.149	11.509	.1805	1263.2	.9000	1045.00	29.057	651.397	1.271	.106	.6660	.6771

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.365 ISEN. EFF.= .877 POLY. EFF.= .882 DELTA T ON T = .106

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	538.71	489.16	727.07	602.752	558.797	24.452	18.752	.6277	42.24	24.87	53.519	.0905
2	7.3325	544.55	493.06	729.33	602.610	558.576	24.413	18.711	.6244	41.61	22.68	-86.503	.0903
3	7.4017	549.49	473.19	729.38	602.619	558.494	24.395	18.588	.6291	41.09	20.50	-30.307	.0902
4	7.4693	553.65	475.40	724.74	602.722	558.516	24.391	18.670	.6296	41.65	18.35	-20.659	.0902
5	7.5372	557.24	472.10	730.34	602.892	558.614	24.402	18.677	.6301	40.27	16.25	-17.045	.0901
6	7.6040	560.41	469.21	730.91	603.118	558.771	24.420	18.685	.6305	39.94	14.19	-15.498	.0902
7	7.6703	562.94	467.17	731.54	603.483	559.060	24.447	18.699	.6309	39.69	12.19	-14.395	.0902
8	7.7363	564.99	465.61	732.05	603.925	559.442	24.481	18.722	.6311	39.50	10.24	-15.217	.0902
9	7.8022	566.24	464.03	732.12	604.370	559.878	24.515	18.751	.6309	39.34	8.33	-16.122	.0903
10	7.8684	563.49	465.14	731.30	605.477	561.096	24.535	18.787	.6295	39.60	6.48	-17.782	.0903
11	7.9354	557.[illegible]	473.33	729.40	607.012	562.855	24.533	18.830	.6269	40.16	4.67	-20.532	.0902
12	8.0035	550.13	473.90	726.10	608.434	564.679	24.525	18.879	.6231	40.74	2.91	-25.364	.0901
13	8.0732	542.45	474.75	720.83	609.388	566.254	24.491	18.934	.6179	41.19	1.17	-34.617	.0902
14	8.1444	533.06	473.73	713.19	609.989	567.780	24.425	18.996	.6103	41.63	-.57	-56.247	.0902
15	8.2175	520.93	471.30	702.43	610.324	569.373	24.320	19.064	.6004	42.14	-2.31	-150.555	.0903
16	8.2939	490.39	471.34	689.79	612.553	573.074	24.177	19.140	.5875	43.90	-4.01	252.301	.0900
17	8.3756	465.53	447.93	674.42	613.383	577.649	24.003	19.226	.5723	46.35	-5.58	70.333	.0897
18	8.4645	430.05	492.37	654.19	617.405	581.905	23.732	19.321	.5531	48.90	-6.95	42.228	.0895
19	8.5623	392.47	489.01	626.25	617.541	585.011	23.487	19.426	.5281	51.19	-8.11	34.246	.0895
20	8.6721	345.76	483.03	594.07	617.795	588.525	23.166	19.539	.4934	54.41	-9.01	41.862	.0895
21	8.8013	282.08	482.40	558.92	619.134	593.238	22.849	19.667	.4673	59.68	-9.37	********	.0894

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-42.344	4.917	.0424	1034.4	.5612	766.47	25.143	607.560	1.664	.162	.9653	.9677
2	-41.033	1.230	-45.240	4.749	.0432	1044.5	.5744	781.68	25.375	609.291	1.661	.162	.9616	.9662
3	-41.726	.848	-4[illegible].300	4.583	.0433	1054.3	.6863	795.42	25.608	611.107	1.660	.162	[illegible]	.9647
4	-42.341	.148	-46.734	4.413	.0443	1064.0	.6972	806.06	25.842	612.712	1.660	.162	[illegible]	[illegible]
5	-42.330	-.632	-47.147	4.251	.0447	1073.6	.7074	813.96	26.078	614.412	1.660	.162	[illegible]	[illegible]
6	-43.309	-1.203	-47.508	4.039	.0443	1083.1	.7170	831.22	26.316	616.111	1.662	.163	.9584	[illegible]
7	-44.043	-1.233	-48.003	3.965	.0460	1092.6	.7256	841.43	26.546	617.814	1.664	.163	.9566	[illegible]
8	-44.341	-1.072	-48.435	3.803	.0474	1102.0	.7336	850.91	26.773	619.525	1.666	.164	.9544	[illegible]
9	[illegible]	-.713	-43.320	3.810	.0487	1111.4	.7411	859.99	27.004	621.247	1.668	.165	.9523	[illegible]
10	[illegible]	-.242	-43.273	3.823	.0507	1120.8	.7436	863.76	27.118	622.391	1.670	.167	.9417	[illegible]
11	[illegible]	.350	-4[illegible].312	3.925	.0742	1130.3	.7425	863.87	27.132	624.772	1.670	.170	.9295	[illegible]
12	[illegible]	1.034	-50.419	4.131	.0383	1140.0	.7414	863.94	27.194	626.500	1.669	.173	.9098	.9161
13	[illegible]	1.030	-51.221	4.493	.0393	1150.0	.7422	866.09	27.294	628.440	1.667	.175	.8977	.9141
14	-47.147	3.049	-52.153	3.016	.1004	1160.1	.7437	869.00	27.420	630.420	1.662	.176	.8866	[illegible]
15	-47.570	4.220	-53.413	3.743	.1159	1170.5	.7451	871.92	27.556	632.430	1.655	.177	.8753	[illegible]
16	-48.010	3.439	-54.743	3.733	.1428	1181.4	.7334	860.97	27.365	634.350	1.655	.181	.8478	[illegible]
17	-48.433	3.831	-56.554	3.065	.1804	1193.0	.7169	844.68	27.073	636.840	1.633	.186	.8063	[illegible]
18	-49.058	8.225	-58.134	3.935	.2091	1205.7	.7035	832.42	26.337	639.355	1.618	.190	.7738	.7886
19	-49.781	3.471	-61.734	12.058	.2253	1219.6	.7001	830.23	26.942	642.152	1.598	.191	.7513	.7671
20	-50.439	10.331	-65.312	14.873	.2437	1235.3	.6960	827.64	27.001	645.330	1.576	.131	.7268	.7429
21	-51.361	13.830	-6[illegible].913	15.592	.2707	1253.8	.6878	821.31	26.981	649.139	1.555	.134	.6931	.7115

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.646 ISEN. EFF.= .878 POLY. EFF.= .886 DELTA T ON T = .174

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4492	707.50	645.92	958.07	632.659	556.411	23.837	18.377	.8287	42.44	19.79	-2.228	.0891
2	7.4945	697.07	647.04	951.09	633.434	558.392	23.925	18.568	.8207	42.87	17.73	-2.432	.0897
3	7.5451	687.32	647.27	944.27	634.230	560.265	23.025	18.788	.8133	43.27	15.77	-2.695	.0904
4	7.5950	676.69	647.26	937.93	634.993	562.010	23.120	18.976	.8058	43.63	13.92	-3.013	.0910
5	7.6433	671.19	646.89	932.17	635.694	563.618	23.207	19.150	.8007	43.94	12.15	-3.417	.0916
6	7.6934	664.48	645.21	926.83	636.350	565.092	23.233	19.309	.7951	44.20	10.46	-3.895	[illegible]
7	7.7509	658.28	645.01	922.32	637.099	566.545	23.361	19.457	.7902	44.46	8.85	-4.508	[illegible]
8	7.8030	652.37	646.13	918.59	637.926	567.945	23.455	19.594	.7860	44.71	7.30	-5.301	.0930
9	7.8537	648.37	643.43	915.20	638.792	569.259	23.543	19.721	.7823	44.92	5.81	-6.376	.0934
10	7.9092	638.68	651.11	912.05	640.403	571.401	23.533	19.841	.7780	45.55	4.38	-7.904	[illegible]
11	7.9652	625.23	655.89	906.39	642.762	574.356	23.617	19.955	.7723	46.50	2.99	-10.210	.0937
12	8.0208	611.59	665.23	904.45	645.036	577.216	23.633	20.068	.7677	47.44	1.64	-14.000	.0937
13	8.0730	600.83	670.57	893.94	646.779	579.655	23.636	20.175	.7622	48.18	.32	[illegible]	.0938
14	8.1330	587.31	672.40	883.17	648.076	581.949	23.532	20.282	.7551	48.84	-.96	[illegible]	.0940
15	8.2005	573.32	671.69	863.24	648.921	584.261	23.471	20.388	.7452	49.51	-2.29	120.[illegible]	.0941
16	8.2652	538.46	683.30	869.37	632.210	589.497	23.235	20.499	.7308	51.76	-3.60	31.588	[illegible]
17	8.3377	491.59	693.31	855.30	656.633	596.020	28.975	20.622	.7146	54.92	-4.87	21.091	[illegible]
18	8.4177	444.17	712.47	838.23	660.446	602.265	23.713	20.764	.6973	58.18	-6.14	[illegible]	[illegible]
19	8.5177	397.37	712.41	815.74	651.945	606.634	26.482	20.928	.6755	60.85	-7.19	[illegible]	[illegible]
20	8.6107	343.16	716.12	794.10	664.424	612.289	23.154	21.117	.6547	64.40	-8.42	37.352	[illegible]
21	8.7339	263.34	733.32	791.43	670.877	619.531	28.115	21.341	.6405	69.79	-9.37	********	.0929

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	CHAM	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.493	-30.344	6.263	.0569	1061.1	.7087	814.80	25.633	612.193	1.962	.220	.9658	.9681
2	-24.331	2.533	-31.133	6.262	.0577	1068.1	.7027	814.36	25.844	613.432	1.968	.221	.9635	.9668
3	-25.095	2.723	-31.416	5.200	.0585	1075.2	.6976	803.60	26.004	614.587	1.975	.223	.9621	.9656
4	-25.456	2.273	-32.411	5.143	.0591	1092.3	.6935	805.30	26.158	615.960	1.981	.224	.9609	.9644
5	-27.223	1.559	-33.431	5.175	.0593	1089.5	.6906	803.97	26.333	617.253	1.987	.225	.9597	.9634
6	-27.332	1.135	-34.135	6.154	.0598	1096.7	.6887	802.60	26.514	618.568	1.993	.227	.9586	.9624
7	-28.700	1.109	-34.950	5.175	.0612	1104.0	.6871	801.96	26.674	619.906	1.996	.228	.9567	.9607
8	-29.377	1.798	-35.470	6.099	.0631	1111.5	.6860	808.73	26.341	621.268	2.004	.230	.9545	.9587
9	-29.936	1.535	-35.342	5.035	.0649	1119.0	.6837	802.25	27.008	622.655	2.011	.232	.9523	.9567
10	-30.508	2.135	-35.537	5.094	.0737	1126.6	.6792	795.24	27.019	624.074	2.014	.235	.9416	.9470
11	-31.102	2.403	-37.235	6.195	.0930	1134.4	.6684	785.54	26.922	625.540	2.015	.239	.9252	.9321
12	-31.606	3.652	-37.334	6.299	.1106	1142.5	.6580	775.23	26.832	627.061	2.016	.244	.9092	.9177
13	-32.312	4.721	-38.071	5.565	.1325	1150.8	.6510	763.53	26.817	628.638	2.017	.247	.8970	.9066
14	-32.531	5.931	-39.531	7.102	.1445	1159.3	.6454	763.37	26.932	630.273	2.014	.249	.8859	.8965
15	-32.954	7.309	-40.379	7.325	.1579	1168.1	.6400	755.54	26.854	631.371	2.005	.251	.8745	.8861
16	-33.361	8.772	-42.342	9.151	.1942	1177.4	.6139	730.63	26.432	633.779	1.989	.257	.8419	.8564
17	-33.777	10.299	-44.774	11.495	.2403	1187.5	.5795	692.45	25.905	635.775	1.972	.266	.8033	.8211
18	-34.225	11.735	-47.735	13.511	.2745	1199.0	.5465	657.46	25.434	638.028	1.954	.273	.7703	.7987
19	-34.653	12.958	-51.413	15.509	.3091	1211.9	.5255	638.24	25.339	640.781	1.933	.276	.7485	.7705
20	-35.114	13.314	-55.355	20.971	.3247	1226.5	.5071	613.03	25.134	643.547	1.916	.281	.7249	.7487
21	-35.617	13.234	-57.155	25.533	.3603	1244.3	.4737	577.94	24.530	647.195	1.913	.282	.6961	.7223

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.994 ISEN. EFF.= .875 POLY. EFF.= .887 DELTA T ON T = .246

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5433	730.42	524.55	1101.42	652.817	565.192	34.335	19.316	.9431	48.45	10.63	-2.464	.0922
2	7.5933	719.45	523.02	1090.23	657.749	567.234	34.275	19.537	.9335	48.78	9.84	-3.212	.0929
3	7.6277	709.53	515.41	1080.10	655.633	553.957	34.215	19.719	.9235	49.01	9.07	-4.308	.0934
4	7.6641	701.43	517.75	1071.79	655.613	570.416	34.154	19.972	.9151	49.15	8.30	-5.017	.0939
5	7.7095	695.23	530.04	1054.44	659.591	571.549	34.112	19.999	.9079	49.22	7.54	-9.008	.0943
6	7.7517	691.02	531.27	1055.09	665.453	572.702	34.061	20.106	.9016	49.23	6.77	-15.543	.0947
7	7.7945	685.97	735.21	1051.50	659.307	573.720	33.973	20.195	.8953	49.21	6.00	-41.203	.0949
8	7.8335	683.52	730.47	1045.39	655.225	574.659	33.931	20.268	.8893	49.17	5.23	95.686	.0951
9	7.8837	581.09	785.41	1039.40	655.080	575.481	33.744	20.327	.8833	49.08	4.46	24.493	.0952
10	7.9235	572.79	795.39	1035.53	556.530	577.459	33.713	20.375	.8799	49.54	3.69	14.776	.0951
11	7.9772	560.13	795.34	1035.53	663.132	580.259	33.675	20.416	.8759	50.40	2.91	10.937	.0949
12	8.0235	547.52	397.05	1034.77	671.763	583.059	33.631	20.452	.8740	51.25	2.12	8.915	.0946
13	8.0777	535.43	403.41	1029.90	673.183	585.320	33.475	20.453	.8532	51.80	1.32	7.694	.0944
14	8.1337	520.74	409.25	1023.57	674.105	587.384	33.283	20.510	.8613	52.24	.50	5.384	.0941
15	8.1355	510.00	303.99	1017.22	675.158	589.457	33.093	20.534	.8545	52.58	-.35	6.277	.0939
16	8.2435	481.44	330.39	1013.71	590.415	545.327	32.875	20.561	.8474	55.00	-1.26	5.809	.0931
17	8.3075	530.23	359.82	1010.15	587.417	602.955	32.654	20.603	.8391	58.34	-2.28	5.539	.0921
18	8.3799	470.52	394.95	1005.23	693.834	610.224	32.467	20.670	.8301	61.66	-3.44	5.571	.0913
19	8.4513	438.29	397.52	993.22	633.090	615.497	32.335	20.766	.8216	63.96	-4.83	5.646	.0918
20	8.5537	385.47	313.05	931.03	703.102	621.973	32.132	20.394	.8133	67.11	-6.60	6.442	.0906
21	8.6533	282.25	335.35	977.97	710.342	631.206	31.953	21.097	.7941	73.23	-8.95	20.749	.0901

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.667	10.931	-18.345	6.297	.0782	1075.4	.6627	772.67	25.937	614.734	2.336	.284	.9652	.9691
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	-31.371	13.159	-40.612	25.248	.4511	1234.9	.3337	410.68	22.785	645.266	2.175	.369	.6784	.7030

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.271 ISEN. EFF.= .865 POLY. EFF.= .880 DELTA T ON T = .304

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.8746	579.38	821.46	1006.32	668.917	571.514	36.336	28.995	.9195	54.62	7.82	3.340	.0948
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	8.6399	284.38	935.67	981.66	710.342	638.683	31.959	21.026	.7975	73.16	-6.15	3.005	.0849

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6149	691.13	815.99	1070.11	665.017	570.912	34.336	20.012	.9133	49.77	9.06	26.367	.0945
2	7.6716	722.59	811.11	1096.35	665.749	567.935	34.275	19.621	.9296	48.30	8.89	174.339	.0931
3	7.7213	751.34	805.52	1101.87	665.683	565.848	34.218	19.249	.9452	46.97	8.59	-66.412	[illegible]
4	7.7695	775.80	803.27	1114.59	665.610	562.641	34.164	18.939	.9582	45.89	8.22	-34.735	[illegible]
5	7.8136	794.22	795.29	1123.95	665.551	560.833	34.112	18.705	.9678	45.04	7.83	-26.265	[illegible]
6	7.8573	808.08	790.91	1130.38	665.483	559.561	34.061	18.536	.9744	44.37	7.47	-23.083	[illegible]
7	7.8999	817.16	795.61	1133.55	665.367	558.040	33.973	18.420	.9777	43.87	7.13	-22.235	[illegible]
8	7.9420	823.00	783.63	1134.37	665.225	556.550	33.861	18.346	.9787	43.49	6.85	-23.371	[illegible]
9	7.9837	826.49	773.44	1133.59	665.000	558.552	33.784	18.308	.9780	43.19	6.61	-26.663	[illegible]
10	8.0233	823.10	773.49	1133.62	666.530	560.003	33.719	18.299	.9763	43.44	6.40	-33.135	[illegible]
11	8.0672	814.49	793.14	1134.07	669.132	562.533	33.675	18.313	.9750	44.09	6.21	-47.093	[illegible]
12	8.1092	804.20	795.74	1133.49	671.763	565.206	33.631	18.369	.9722	44.81	6.01	-83.907	[illegible]
13	8.1325	793.30	801.98	1128.05	673.183	567.735	33.475	18.466	.9654	45.31	5.80	1640.296	[illegible]
14	8.1951	781.17	802.81	1120.14	674.165	570.197	33.280	18.483	.9566	45.78	5.57	68.421	[illegible]
15	8.2402	767.39	803.52	1111.17	675.158	572.858	33.083	18.578	.9467	46.32	5.31	31.985	[illegible]
16	8.2853	732.55	823.14	1104.15	680.415	579.431	32.873	18.700	.9355	48.44	4.95	20.432	[illegible]
17	8.3345	682.37	857.00	1095.45	687.417	588.050	32.664	18.871	.9213	51.67	4.30	15.378	[illegible]
18	8.3833	624.50	884.05	1082.33	693.834	596.865	32.467	19.128	.9036	54.76	3.22	12.852	[illegible]
19	8.4478	567.11	899.25	1063.14	698.090	604.567	32.335	19.408	.8820	57.76	1.58	11.864	[illegible]
20	8.5142	478.25	915.95	1034.09	703.102	614.695	32.182	20.058	.8509	62.45	-.77	14.332	[illegible]
21	8.6199	298.15	941.73	987.85	710.342	629.677	31.957	20.989	.8032	72.43	-4.27	-27.461	.0895

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-37.941	49.771	.953	0.0000	0.0	.9133	1070.11	34.336	665.017	2.336	.284	.9642	[illegible]
2	47.872	-37.039	48.300	.427	0.0000	0.0	.9296	1096.35	34.276	665.749	2.332	.284	.9635	[illegible]
3	47.010	-33.984	46.974	-.035	0.0000	0.0	.9452	1101.87	34.218	665.683	[illegible]	.283	.9617	[illegible]
4	46.412	-30.736	45.893	-.523	0.0000	0.0	.9582	1114.59	34.164	665.610	[illegible]	[illegible]	[illegible]	[illegible]
5	45.902	-27.562	45.039	-.923	0.0000	0.0	.9678	1123.95	34.112	665.551	[illegible]	[illegible]	[illegible]	[illegible]
6	45.616	-24.332	44.373	-1.242	0.0000	0.0	.9744	1130.38	34.061	665.483	[illegible]	[illegible]	.9571	[illegible]
7	45.314	-21.152	43.872	-1.442	0.0000	0.0	.9777	1133.55	33.973	665.367	[illegible]	[illegible]	.9547	[illegible]
8	45.058	-18.031	43.489	-1.563	0.0000	0.0	.9787	1134.37	33.861	665.225	[illegible]	[illegible]	.9518	[illegible]
9	44.945	-14.890	43.133	-1.656	0.0000	0.0	.9780	1133.59	33.784	665.000	[illegible]	[illegible]	.9463	[illegible]
10	44.685	-11.460	43.441	-1.244	0.0000	0.0	.9763	1133.62	33.719	666.530	2.294	[illegible]	.9375	[illegible]
11	44.507	-7.711	44.093	-.492	0.0000	0.0	.9750	1134.07	33.675	669.132	2.291	.290	.9196	[illegible]
12	44.592	-3.821	44.807	.225	0.0000	0.0	.9722	1133.49	33.631	671.763	[illegible]	[illegible]	[illegible]	[illegible]
13	44.701	-.274	45.312	.610	0.0000	0.0	.9654	1128.05	33.476	673.183	[illegible]	[illegible]	[illegible]	[illegible]
14	44.943	3.020	45.783	.840	0.0000	0.0	.9566	1120.14	33.288	674.165	2.265	.300	[illegible]	[illegible]
15	45.244	6.570	46.321	1.878	0.0000	0.0	.9467	1111.17	33.080	675.158	[illegible]	[illegible]	[illegible]	[illegible]
16	45.531	11.234	48.436	2.905	0.0000	0.0	.9355	1104.15	32.878	680.415	[illegible]	[illegible]	[illegible]	[illegible]
17	45.936	17.620	51.672	3.637	0.0000	0.0	.9213	1095.46	32.664	687.417	[illegible]	[illegible]	[illegible]	[illegible]
18	46.378	25.132	54.753	3.384	0.0000	0.0	.9036	1082.38	32.467	693.834	[illegible]	.339	[illegible]	[illegible]
19	47.404	32.989	57.762	10.353	0.0000	0.0	.8820	1063.14	32.336	698.090	2.208	.346	[illegible]	[illegible]
20	48.801	40.326	62.451	13.652	0.0000	0.0	.8509	1034.09	32.182	703.102	2.190	.356	[illegible]	[illegible]
21	50.514	45.632	72.433	21.013	0.0000	0.0	.8032	987.85	31.959	710.342	2.175	.369	.6784	[illegible]

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.271 ISEN. EFF.= .865 POLY. EFF.= .880 DELTA T ON T = .306

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7130	1067.78	688.37	1270.44	655.817	531.958	33.537	15.278	1.1230	32.81	5.21	-3.688	.0774
2	7.7331	1053.31	672.51	1250.23	655.747	536.113	33.512	15.676	1.1009	32.59	4.57	-3.538	.0788
3	7.7943	1039.70	655.54	1229.11	655.683	540.403	33.462	16.102	1.0790	32.23	3.96	-3.265	[illegible]
4	7.8344	1025.16	638.22	1207.57	655.618	544.700	33.405	16.532	1.0549	31.91	3.48	[illegible]	[illegible]
5	7.8736	1010.32	622.04	1186.20	655.551	548.884	33.340	16.954	1.0323	31.63	2.98	[illegible]	[illegible]
6	7.9123	993.37	607.94	1164.99	655.483	552.361	33.248	17.357	1.0102	31.44	2.49	[illegible]	[illegible]
7	7.9520	977.39	594.62	1144.05	655.367	556.000	33.125	17.734	.9895	31.32	2.19	[illegible]	[illegible]
8	7.9910	961.33	582.25	1123.92	655.225	560.512	32.991	18.065	.9680	31.20	2.00	[illegible]	[illegible]
9	8.0316	946.23	571.43	1104.95	655.080	563.879	32.891	18.411	.9488	31.09	1.92	[illegible]	[illegible]
10	8.0721	933.99	560.71	1089.38	660.530	568.172	32.775	18.712	.9320	30.98	1.92	[illegible]	[illegible]
11	8.1133	923.34	552.83	1076.21	669.132	573.154	32.703	18.989	.9167	30.91	1.99	[illegible]	[illegible]
12	8.1531	912.95	546.55	1064.03	671.763	577.957	32.633	19.243	.9025	30.91	2.10	[illegible]	[illegible]
13	8.1975	900.79	540.50	1050.53	673.183	581.757	32.519	19.474	.8883	30.97	2.24	[illegible]	[illegible]
14	8.2407	889.02	535.25	1036.85	674.165	585.111	32.373	19.682	.8742	31.08	2.41	-3.798	[illegible]
15	8.2845	875.92	531.17	1024.39	675.158	588.242	32.230	19.862	.8614	31.23	2.60	-4.009	.0910
16	8.3290	867.09	532.03	1017.30	680.415	594.722	32.111	20.010	.8509	31.47	2.74	-4.324	.0917
17	8.3744	860.37	535.04	1013.17	687.417	602.451	31.985	20.116	.8420	31.88	2.72	-5.369	[illegible]
18	8.4203	853.51	543.70	1011.99	693.834	609.095	31.871	20.159	.8354	32.50	2.42	-7.412	.0892
19	8.4683	849.13	553.64	1015.34	698.090	612.906	31.739	20.103	.8367	33.25	1.75	-13.3[illegible]	[illegible]
20	8.5133	849.58	572.69	1024.59	703.102	615.281	31.674	19.923	.8419	33.98	.51	34.035	.0872
21	8.5730	854.79	588.76	1037.93	710.342	621.271	31.475	19.643	.8435	34.56	-2.03	9.967	.0852

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAD	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.847	32.303	.850	.0544	0.0	1.1230	1270.44	33.537	655.817	2.283	.284	.9399	.9429
2	31.687	-23.303	32.540	.859	.0522	0.0	1.1009	1250.25	33.512	655.749	2.280	.284	.9366	.9417
3	31.360	-21.207	32.232	.872	.0503	0.0	1.0780	1229.11	33.462	655.683	2.277	.283	.9331	.9404
4	31.017	-18.942	31.903	.888	.0498	0.0	1.0549	1207.57	33.405	655.618	2.273	[illegible]	[illegible]	[illegible]
5	30.728	-16.552	31.628	.905	.0501	0.0	1.0323	1186.20	33.340	655.551	2.269	[illegible]	[illegible]	[illegible]
6	30.510	-14.313	31.439	.929	.0524	0.0	1.0102	1164.99	33.248	655.483	2.262	[illegible]	[illegible]	[illegible]
7	30.365	-12.203	31.316	.951	.0548	0.0	.9896	1144.05	33.125	655.367	2.256	[illegible]	[illegible]	[illegible]
8	30.231	-10.127	31.203	.971	.0573	0.0	.9680	1123.92	32.991	655.225	2.245	[illegible]	[illegible]	[illegible]
9	30.094	-8.012	31.089	.991	.0593	0.0	.9488	1104.95	32.893	655.080	2.236	[illegible]	[illegible]	[illegible]
10	29.969	-5.852	30.979	1.009	.0612	0.0	.9320	1089.38	32.775	660.530	2.230	.285	[illegible]	[illegible]
11	29.385	-3.729	30.912	1.024	.0632	0.0	.9167	1076.21	32.703	669.132	2.225	.290	[illegible]	[illegible]
12	29.871	-1.604	30.913	1.037	.0653	0.0	.9026	1064.05	32.633	671.763	2.221	.295	[illegible]	[illegible]
13	29.323	.430	30.955	1.043	.0637	0.0	.8883	1050.53	32.519	673.183	2.213	.298	[illegible]	[illegible]
14	30.030	2.639	31.050	1.043	.0613	0.0	.8742	1036.86	32.373	674.165	2.203	.300	[illegible]	[illegible]
15	30.185	5.274	31.233	1.048	.0586	0.0	.8614	1024.39	32.230	675.158	2.193	.302	[illegible]	[illegible]
16	30.420	8.330	31.471	1.043	.0541	0.0	.8508	1017.30	32.111	680.415	2.185	[illegible]	[illegible]	[illegible]
17	30.839	11.030	31.879	1.038	.0492	0.0	.8420	1013.17	31.996	687.417	2.176	[illegible]	[illegible]	[illegible]
18	31.463	15.823	32.498	1.035	.0447	0.0	.8364	1011.98	31.871	693.834	2.169	[illegible]	[illegible]	[illegible]
19	32.212	20.042	33.249	1.037	.0426	0.0	.8367	1015.34	31.790	698.090	2.163	.346	[illegible]	[illegible]
20	32.936	24.213	33.982	1.047	.0419	0.0	.8419	1024.56	31.674	703.102	2.155	.356	[illegible]	[illegible]
21	33.475	29.225	34.558	1.081	.0438	0.0	.8495	1037.93	31.475	710.342	2.142	.369	.6958	.6980

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.217 ISEN. EFF.= .837 POLY. EFF.= .854 DELTA T ON T = .304

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	915.47	290.14	960.35	665.817	589.412	32.805	21.382	.8068	17.58	-2.23	-5.196	[illegible]
2	7.7553	898.92	284.25	942.79	669.749	592.117	32.753	21.701	.7902	[illegible]	-2.44	[illegible]	[illegible]
3	7.7934	882.40	279.03	925.94	655.683	594.564	32.633	21.901	.7744	[illegible]	-2.69	[illegible]	[illegible]
4	7.8252	867.43	274.31	909.92	662.618	597.024	32.603	22.277	.7595	[illegible]	-2.85	[illegible]	[illegible]
5	7.8500	852.57	269.54	894.54	655.551	599.274	32.553	22.327	.7453	[illegible]	-2.96	[illegible]	[illegible]
6	7.8974	837.32	264.73	878.73	655.433	601.528	32.433	22.746	.7308	17.54	-3.01	[illegible]	[illegible]
7	7.9350	823.52	259.35	863.39	655.367	603.630	32.253	22.932	.7168	17.48	-2.98	[illegible]	[illegible]
8	7.9734	810.31	254.13	849.23	665.225	605.499	32.120	[illegible]	.7040	[illegible]	-2.87	[illegible]	[illegible]
9	8.0141	798.75	250.00	836.93	655.080	607.066	31.961	[illegible]	.6929	17.38	-2.68	[illegible]	[illegible]
10	8.0535	791.15	247.92	829.08	656.530	609.512	31.849	23.274	.6858	17.39	-2.46	[illegible]	[illegible]
11	8.0932	785.76	245.53	823.37	653.132	612.977	31.743	23.330	.6766	17.43	-2.16	[illegible]	[illegible]
12	8.1421	781.73	245.75	819.16	671.763	616.215	31.643	23.153	.6732	17.49	-1.79	[illegible]	[illegible]
13	8.1871	777.93	244.31	815.34	673.163	618.131	31.553	23.274	.6692	17.47	-1.41	[illegible]	[illegible]
14	8.2331	774.48	243.31	811.99	674.165	619.595	31.449	23.374	.6655	17.48	-1.01	[illegible]	[illegible]
15	8.2810	771.73	243.57	809.32	675.158	620.949	31.347	23.357	.6628	17.52	-.61	[illegible]	[illegible]
16	8.3273	774.15	243.45	812.15	650.415	625.839	31.237	23.325	.6623	17.59	-.22	[illegible]	[illegible]
17	8.3766	773.18	243.90	817.01	637.417	632.207	31.249	23.277	.6638	17.74	.15	[illegible]	[illegible]
18	8.4251	782.79	254.05	822.99	633.334	637.832	31.211	23.218	.6649	17.98	.45	[illegible]	[illegible]
19	8.4734	787.44	260.73	829.49	698.030	641.211	31.177	23.117	.6654	18.32	.74	[illegible]	[illegible]
20	8.5274	792.32	293.03	837.31	703.102	645.160	31.121	22.391	.6727	18.75	.90	[illegible]	[illegible]
21	8.5739	793.04	273.71	840.26	710.342	651.160	31.085	22.826	.6767	19.23	.88	76.314	.0945

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.735	1.351	.1054	0.0	.8068	960.35	32.806	665.817	2.232	.284	.8872	.9178
2	16.190	-3.931	17.547	1.357	.1033	0.0	.7902	942.79	32.735	[illegible]	2.229	[illegible]	[illegible]	[illegible]
3	16.170	-3.334	17.536	1.369	.1015	0.0	.7744	925.94	32.639	[illegible]	2.225	[illegible]	[illegible]	[illegible]
4	16.160	-7.736	17.547	1.388	.1004	0.0	.7595	903.82	32.636	[illegible]	2.221	[illegible]	[illegible]	[illegible]
5	16.142	-7.053	17.557	1.419	.1005	0.0	.7453	894.54	32.593	[illegible]	2.216	[illegible]	[illegible]	[illegible]
6	16.098	-6.250	17.535	1.443	.1045	0.0	.7308	879.75	32.439	[illegible]	2.207	[illegible]	[illegible]	[illegible]
7	15.995	-3.394	17.451	1.433	.1038	0.0	.7168	863.39	32.280	[illegible]	2.197	[illegible]	[illegible]	[illegible]
8	15.930	-4.409	17.412	1.523	.1133	0.0	.7040	849.23	32.120	695.225	2.185	[illegible]	[illegible]	[illegible]
9	15.921	-3.433	17.379	1.553	.1175	0.0	.6929	836.99	31.961	635.080	2.175	[illegible]	[illegible]	[illegible]
10	15.900	-2.531	17.392	1.593	.1213	0.0	.6858	829.09	31.849	666.530	2.167	.285	[illegible]	[illegible]
11	15.807	-1.643	17.429	1.623	.1253	0.0	.6766	823.57	31.745	669.132	2.160	.290	[illegible]	[illegible]
12	15.810	-.915	17.425	1.549	.1301	0.0	.6732	819.16	31.643	671.763	2.153	[illegible]	[illegible]	[illegible]
13	15.802	-.306	17.403	1.600	.1272	0.0	.6692	815.54	31.553	673.163	2.147	[illegible]	[illegible]	[illegible]
14	15.805	.331	17.431	1.677	.1237	0.0	.6655	811.95	31.449	674.165	2.140	[illegible]	[illegible]	[illegible]
15	15.838	1.033	17.515	1.677	.1195	0.0	.6628	809.32	31.347	675.158	2.133	[illegible]	[illegible]	[illegible]
16	15.922	1.947	17.531	1.963	.1115	0.0	.6623	812.16	31.237	[illegible]	2.130	[illegible]	[illegible]	[illegible]
17	16.079	2.989	17.737	1.695	.1023	0.0	.6638	817.01	31.249	[illegible]	2.126	[illegible]	[illegible]	[illegible]
18	16.331	4.137	17.931	1.651	.0942	0.0	.6649	822.99	31.210	[illegible]	2.124	[illegible]	[illegible]	[illegible]
19	16.575	5.422	18.323	1.643	.0902	0.0	.6654	829.49	31.178	[illegible]	2.122	[illegible]	.6911	[illegible]
20	17.030	5.833	18.742	1.602	.0875	0.0	.6727	837.31	31.121	703.102	2.118	[illegible]	[illegible]	[illegible]
21	17.510	9.542	19.223	1.719	.0802	0.0	.6767	840.26	31.086	710.342	2.110	.369	.6414	.6764

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.163 ISEN. EFF.= .888 PO.Y. EFF.= .828 DELTA T ON T = .304

STATION 1, FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	751.21	81.34	755.61	655.817	618.550	32.053	24.744	.6198	6.18	-4.29	16.241	.1079
2	7.7034	749.51	79.55	752.82	655.749	618.830	31.982	24.737	.6174	6.07	-4.15	16.772	.1078
3	7.7437	745.32	77.54	749.97	655.683	619.120	31.907	24.729	.6149	5.96	-3.98	17.386	.1077
4	7.7337	743.06	76.33	746.97	655.618	619.426	31.829	24.719	.6123	5.87	-3.81	18.087	.1076
5	7.8226	740.02	75.02	743.81	655.551	619.750	31.744	24.707	.6095	5.79	-3.61	18.865	.1075
6	7.8625	733.72	73.54	737.40	655.483	620.463	31.657	24.694	.6039	5.72	-3.39	19.800	.1073
7	7.9035	726.27	72.05	729.84	655.367	621.271	31.405	24.680	.5974	5.67	-3.15	20.891	.1071
8	7.9435	718.20	70.60	721.66	655.225	622.112	31.214	24.664	.5903	5.61	-2.87	22.226	.1069
9	7.9934	710.39	69.30	713.75	655.080	622.987	31.031	24.643	.5834	5.57	-2.56	23.821	.1067
10	8.0341	705.90	68.45	709.21	656.530	624.746	30.901	24.613	.5788	5.54	-2.22	25.746	.1063
11	8.0831	702.08	67.79	705.34	659.132	627.9[illegible]	30.775	24.617	.5743	5.52	-1.87	27.840	.1057
12	8.1273	699.08	67.22	701.31	671.763	631.0[illegible]	30.647	[illegible].601	.5696	5.50	-1.48	30.061	.1051
13	8.1755	697.08	67.33	700.30	673.183	632.9[illegible]	30.593	[illegible].585	.5681	5.49	-1.09	32.633	.1048
14	8.2248	695.52	66.33	699.02	674.165	633.[illegible]	30.538	24.569	.5655	5.49	-.71	35.056	.1045
15	8.2743	694.55	65.83	697.86	675.158	634.857	30.485	24.553	.5651	5.50	-.35	40.782	.1043
16	8.3235	699.47	67.55	702.72	680.415	639.571	30.508	24.539	.5670	5.52	-.02	47.768	.1034
17	8.3770	705.45	69.55	708.79	687.417	645.980	30.533	24.524	.5691	5.56	.27	59.006	.1024
18	8.4231	711.10	71.24	714.55	693.834	651.532	30.570	24.511	.5712	5.54	.52	73.759	.1014
19	8.4619	714.32	72.27	717.95	698.090	655.495	30.530	24.500	.5723	5.78	.74	127.552	.1008
20	8.5354	716.33	75.25	720.77	703.102	660.165	30.573	24.490	.5725	5.99	.93	321.659	.1000
21	8.5930	719.71	79.65	723.12	710.342	667.154	30.537	24.482	.5714	6.33	1.00	-510.607	.0989

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BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS EFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.334	6.193	2.218	.1544	0.0	.6198	755.61	32.053	655.817	2.161	.284	.8779	.8905
2	3.839	-.933	6.066	2.223	.1555	0.0	.6174	752.82	31.982	655.749	2.176	.284	.8755	.8883
3	3.711	-.328	5.953	2.247	.1544	0.0	.6149	749.97	31.907	655.683	2.171	.283	.8730	.8866
4	3.535	-.347	5.805	2.279	.1534	0.0	.6123	746.97	31.829	655.618	2.166	.283	.8703	.8835
5	3.409	-.732	5.733	2.320	.1537	0.0	.6095	743.81	31.744	655.551	2.160	.283	.8674	.8808
6	3.353	-.578	5.723	2.370	.1594	0.0	.6039	737.40	31.657	655.483	2.149	.283	.8615	.8755
7	3.235	-.530	5.655	2.427	.1653	0.0	.5974	729.84	31.405	655.367	2.137	.283	.8558	.8696
8	3.126	-.531	5.614	2.493	.1717	0.0	.5903	721.66	31.214	655.225	2.124	.283	.8482	.8633
9	3.021	-.472	5.572	.591	.1773	0.0	.5834	713.75	31.031	655.080	2.112	.282	.8417	.8573
10	2.928	-.423	5.539	.611	.1827	0.0	.5788	709.21	30.901	656.530	2.103	.285	.8282	.8451
11	2.851	-.357	5.515	2.655	.1883	0.0	.5743	705.34	30.775	659.132	2.094	.290	.8089	.8275
12	2.793	-.330	5.531	2.708	.1952	0.0	.5696	701.31	30.647	671.763	2.085	.295	.7899	.8103
13	2.757	-.214	5.493	2.735	.1913	0.0	.5681	700.30	30.593	673.183	2.082	.298	.7806	.8018
14	2.746	-.147	5.430	2.744	.1893	0.0	.5655	699.02	30.538	674.165	2.078	.300	.7735	.7954
15	2.765	-.150	5.436	2.731	.1733	0.0	.5651	697.86	30.485	675.158	2.074	.302	.7666	.7890
16	2.813	-.241	5.516	2.703	.1671	0.0	.5670	702.72	30.508	680.415	2.076	.312	.7424	.7672
17	2.885	-.435	5.590	2.675	.1541	0.0	.5691	708.79	30.533	687.417	2.078	.325	.7126	.7402
18	2.963	-.617	5.641	2.620	.1422	0.0	.5712	714.56	30.570	693.834	2.080	.338	.6874	.7175
19	3.110	-.825	5.777	2.557	.1338	0.0	.5723	717.96	30.530	698.090	2.081	.346	.6714	.7029
20	3.230	-.372	5.934	2.705	.1327	-0	.5725	720.77	30.573	703.102	2.080	.356	.6528	.6861
21	3.308	-1.035	6.325	2.313	.1237	.0	.5714	723.12	30.537	710.342	2.078	.369	.6269	.6626

STATION 1, INTEGRATED PERFORMANCE PRESSURE RATIO = 2.108 ISEN. EFF.= .773 POLY. EFF.= .800 DELTA T ON T = .304

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	720.89	0.00	720.89	665.817	622.797	31.301	24.751	.5893	0.00	-1.66	10.624	.1072
2	7.6780	719.05	0.00	719.05	665.749	622.949	31.209	24.709	.5877	0.00	-1.64	10.978	.1069
3	7.7170	717.04	0.00	717.04	665.683	623.123	31.115	24.667	.5860	0.00	-1.60	11.402	.1067
4	7.7568	714.83	0.00	714.83	665.618	623.319	31.019	24.626	.5841	0.00	-1.56	11.914	.1065
5	7.7975	712.41	0.00	712.41	665.551	623.539	30.920	24.587	.5820	0.00	-1.50	12.536	.1063
6	7.8395	705.22	0.00	705.22	665.483	624.316	30.727	24.549	.5758	0.00	-1.43	13.335	.1060
7	7.8827	696.86	0.00	695.85	665.367	625.170	30.517	24.514	.5686	0.00	-1.34	14.417	.1057
8	7.9273	687.76	0.00	687.76	665.225	626.071	30.300	24.481	.5603	0.00	-1.24	15.921	.1054
9	7.9732	678.92	0.00	678.92	665.080	626.928	30.095	24.452	.5532	0.00	-1.11	18.089	.1052
10	8.0205	673.77	0.00	673.77	666.530	628.958	29.953	24.426	.5481	0.00	-.96	21.334	.1047
11	8.0691	668.58	0.00	668.58	669.132	632.142	29.807	24.405	.5425	0.00	-.80	26.585	.1041
12	8.1191	662.71	0.00	662.71	671.763	635.425	29.656	24.389	.5364	0.00	-.62	36.485	.1035
13	8.1702	663.04	0.00	663.04	673.183	636.812	29.636	24.377	.5361	0.00	-.43	59.116	.1032
14	8.2220	663.27	0.00	663.27	674.165	637.770	29.624	24.371	.5359	0.00	-.25	143.173	.1030
15	8.2743	663.15	0.00	663.15	675.158	638.778	29.611	24.370	.5354	0.00	-.07	-448.505	.1029
16	8.3276	670.39	0.00	670.39	680.415	643.247	29.639	24.373	.5394	0.00	.09	-96.799	.1022
17	8.3812	679.03	0.00	679.03	687.417	649.299	29.801	24.380	.5433	0.00	.22	-59.143	.1012
18	8.4351	687.15	0.00	687.15	693.534	654.810	29.905	24.391	.5480	0.00	.33	-45.571	.1004
19	8.4895	691.49	0.00	691.49	698.090	658.581	29.962	24.405	.5499	0.00	.42	-39.697	.0999
20	8.5444	695.81	0.00	695.81	703.102	663.110	30.015	24.420	.5515	0.00	.48	-35.303	.0993
21	8.6038	701.15	0.00	701.15	710.342	669.751	30.063	24.437	.5530	0.00	.52	-33.305	.0984

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.2119	0.0	.5893	720.89	31.301	665.817	2.130	.284	.8482	.8634
2	-7.389	.020	0.000	7.389	.2093	0.0	.5877	719.05	31.209	665.749	2.124	.284	.8450	.8604
3	-7.548	.019	0.000	7.548	.2073	0.0	.5860	717.04	31.115	665.683	2.117	.283	.8416	.8573
4	-7.711	.018	0.000	7.711	.2069	0.0	.5841	714.83	31.019	665.618	2.111	.283	.8381	.8541
5	-7.875	.016	0.000	7.875	.2072	0.0	.5820	712.41	30.920	665.551	2.104	.283	.8345	.8508
6	-8.039	.014	0.000	8.039	.2148	0.0	.5758	705.22	30.727	665.483	2.091	.283	.8271	.8439
7	-8.202	.012	0.000	8.202	.2225	0.0	.5686	696.86	30.517	665.367	2.077	.283	.8192	.8367
8	-8.362	.010	0.000	8.362	.2305	0.0	.5608	687.76	30.300	665.225	2.062	.283	.8111	.8292
9	-8.516	.008	0.000	8.516	.2384	0.0	.5532	678.92	30.095	665.080	2.048	.282	.8036	.8222
10	-8.659	.007	0.000	8.653	.2442	0.0	.5481	673.77	29.953	666.530	2.038	.285	.7898	.8096
11	-8.786	.005	0.000	8.786	.2518	0.0	.5425	668.58	29.807	669.132	2.028	.290	.7702	.7917
12	-8.894	.003	0.000	8.894	.2631	0.0	.5364	662.71	29.656	671.763	2.018	.295	.7510	.7741
13	-8.981	.001	0.000	8.981	.2543	0.0	.5361	663.04	29.636	673.183	2.017	.298	.7432	.7670
14	-9.039	-.001	0.000	9.039	.2471	0.0	.5359	663.27	29.624	674.165	2.016	.300	.7381	.7623
15	-9.062	-.004	0.000	9.062	.2392	0.0	.5354	663.15	29.611	675.158	2.015	.302	.7329	.7576
16	-9.059	-.007	0.000	9.059	.2242	0.0	.5394	670.39	29.639	680.415	2.021	.312	.7153	.7398
17	-9.059	-.012	0.000	9.059	.2075	0.0	.5438	679.03	29.801	687.417	2.028	.325	.6863	.7135
18	-9.084	-.018	0.000	9.084	.1920	0.0	.5480	687.16	29.905	693.534	2.035	.338	.6646	.6939
19	-9.125	-.024	0.000	9.125	.1850	0.0	.5499	691.49	29.962	698.090	2.039	.346	.6507	.6814
20	-9.169	-.031	0.000	9.169	.1767	0.0	.5515	695.81	30.015	703.102	2.042	.356	.6367	.6689
21	-9.213	-.033	0.000	9.213	.1711	0.0	.5530	701.15	30.068	710.342	2.046	.369	.6122	.6486

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.052 ISEN. EFF.= .747 POLY. EFF.= .771 DELTA T ON T = .304

STATION 16 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6608	738.54	0.00	738.54	665.817	620.664	31.381	24.455	.6048	0.00	0.00	0.000	.1062
2	7.6775	734.27	0.00	734.27	665.749	621.117	31.283	[illegible]	.6011	0.00	[illegible]	1367.[illegible]	[illegible]
3	7.7159	729.86	0.00	729.86	665.683	621.516	31.115	[illegible]	.5972	0.00	[illegible]	729.[illegible]	[illegible]
4	7.7553	725.31	0.00	725.31	665.618	622.050	31.013	[illegible]	.5933	0.00	[illegible]	[illegible]	[illegible]
5	7.7958	720.62	0.00	720.62	665.551	622.564	30.920	[illegible]	.5892	0.00	[illegible]	[illegible]	[illegible]
6	7.8374	711.29	0.00	711.29	665.483	623.003	30.727	[illegible]	.5811	0.00	[illegible]	[illegible]	[illegible]
7	7.8804	700.69	0.00	700.69	665.367	624.703	30.517	[illegible]	.5721	0.00	[illegible]	[illegible]	[illegible]
8	7.9246	689.87	0.00	689.87	665.225	[illegible]	30.308	[illegible]	[illegible]	0.00	[illegible]	[illegible]	[illegible]
9	7.9708	679.26	0.00	679.26	665.880	[illegible]	30.095	[illegible]	[illegible]	0.00	[illegible]	[illegible]	[illegible]
10	8.0181	672.54	0.00	672.54	666.530	629.094	29.953	[illegible]	.5471	0.00	[illegible]	[illegible]	[illegible]
11	8.0658	666.02	0.00	666.02	669.132	632.425	29.807	[illegible]	[illegible]	0.00	[illegible]	[illegible]	[illegible]
12	8.1178	659.88	0.00	659.88	671.763	634.222	29.656	24.442	.5333	0.00	[illegible]	372.[illegible]	[illegible]
13	8.1683	658.72	0.00	658.72	673.183	637.282	29.636	24.441	.5324	0.00	[illegible]	424.[illegible]	[illegible]
14	8.2204	658.59	0.00	658.59	674.165	638.282	29.624	[illegible]	.5319	0.00	-.07	585.971	[illegible]
15	8.2732	658.44	0.00	658.44	675.158	639.296	29.611	[illegible]	.5314	0.00	[illegible]	[illegible]	[illegible]
16	8.3267	665.97	0.00	665.97	680.415	643.730	29.692	[illegible]	.5356	0.00	[illegible]	[illegible]	[illegible]
17	8.3805	675.16	0.00	675.16	687.417	649.732	29.801	[illegible]	.5405	0.00	[illegible]	[illegible]	[illegible]
18	8.4347	684.05	0.00	684.05	693.834	655.162	29.905	[illegible]	.5454	0.00	[illegible]	[illegible]	[illegible]
19	8.4892	689.31	0.00	689.31	698.090	658.831	29.962	[illegible]	[illegible]	0.00	[illegible]	[illegible]	[illegible]
20	8.5443	694.67	0.00	694.67	703.182	663.240	30.013	[illegible]	[illegible]	0.00	[illegible]	[illegible]	.0993
21	8.6000	701.15	0.00	701.15	710.342	669.751	30.065	24.437	.5530	0.00	0.00	0.000	.0984

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6600	739.59	0.00	739.59	665.817	620.535	31.381	24.437	.6057	0.00	0.00	0.000	.1062
2	7.6774	735.31	0.00	735.31	665.749	620.990	31.289	24.437	.6020	0.00	[illegible]	0.000	[illegible]
3	[illegible]	730.83	0.00	730.83	665.683	621.462	31.115	24.437	.5981	0.00	[illegible]	0.000	[illegible]
4	[illegible]	726.38	0.00	726.38	665.618	621.950	31.013	24.437	.5941	0.00	[illegible]	0.000	[illegible]
5	[illegible]	721.35	0.00	721.35	665.551	622.453	30.920	24.437	.5900	0.00	[illegible]	0.000	[illegible]
6	7.8373	712.15	0.00	712.15	665.483	623.301	30.727	24.437	.5818	0.00	[illegible]	0.000	[illegible]
7	7.8803	701.60	0.00	701.60	665.367	624.611	30.517	24.437	.5729	0.00	[illegible]	0.000	[illegible]
8	[illegible]	690.58	0.00	690.58	665.225	625.749	30.300	24.437	.5632	0.00	[illegible]	0.000	[illegible]
9	7.9706	[illegible]	0.00	679.[illegible]	665.880	[illegible]	30.095	24.437	.5540	0.00	[illegible]	0.000	[illegible]
10	8.0180	673.08	0.00	673.08	666.530	[illegible]	29.953	24.437	.5475	0.00	[illegible]	0.000	[illegible]
11	8.0667	666.46	0.00	666.46	669.132	632.376	29.807	24.437	.5407	0.00	[illegible]	0.000	[illegible]
12	[illegible]	[illegible]	0.00	659.44	671.763	[illegible]	29.656	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
13	[illegible]	[illegible]	0.00	659.40	673.183	637.258	29.636	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
14	[illegible]	[illegible]	0.00	658.79	674.165	638.270	29.624	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
15	[illegible]	[illegible]	0.00	658.97	675.158	639.270	29.611	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
16	[illegible]	[illegible]	0.00	666.85	680.415	643.720	29.693	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
17	[illegible]	[illegible]	0.00	675.21	687.417	649.707	29.801	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
18	8.4346	684.88	0.00	684.88	693.834	655.159	29.905	24.437	.5454	0.00	[illegible]	0.000	[illegible]
19	8.4893	689.32	0.00	689.32	698.090	658.829	29.962	24.437	.5481	0.00	[illegible]	0.000	[illegible]
20	[illegible]	[illegible]	0.00	694.68	703.182	[illegible]	30.015	24.437	[illegible]	0.00	[illegible]	0.000	[illegible]
21	8.6000	701.15	0.00	701.15	710.342	669.751	30.065	24.437	.5530	0.00	0.00	0.000	.0984

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	.9271	9.753	6.297	.0702	.4101	.4207	.5553	.7537	.7667	-60.937	-12.647	6.878	10.991
2	6.9616	7.5893	.9413	9.479	6.548	.0714	.4304	.4399	.5578	.7341	.7587	-61.347	-13.408	6.831	10.878
3	6.3722	7.5277	.9562	8.247	6.756	.0725	.4473	.4556	.5563	.7173	.7505	-61.731	-14.179	6.367	10.280
4	7.0822	7.3091	.9704	8.053	6.910	.0734	.4612	.4585	.5519	.7043	.7423	-62.077	-14.939	6.420	9.656
5	7.1315	7.7035	.9943	7.129	7.073	.0740	.4726	.4791	.5492	.6931	.7340	-62.381	-15.712	6.325	8.898
6	7.3005	7.7517	.9934	7.832	7.171	.0744	.4823	.4177	.5366	.5833	.7257	-62.657	-16.438	6.095	8.096
7	7.4092	7.7948	1.3122	7.757	7.306	.0763	.4908	.4453	.5271	.5734	.7171	-62.921	-17.265	5.570	7.454
8	7.5176	7.8380	1.3253	7.636	7.436	.0737	.4981	.5116	.5162	.6630	.7084	-63.186	-17.985	4.927	6.983
9	7.6260	7.3837	1.3333	7.547	7.733	.0809	.5040	.5063	.5045	.6620	.6997	-63.456	-18.642	4.090	6.629
10	7.7345	7.3236	1.1525	7.606	7.612	.0977	.5189	.5211	.4922	.5465	.6984	-63.737	-19.239	3.065	6.663
11	7.8435	7.9772	1.0557	7.571	7.341	.1237	.5401	.5415	.4796	.5300	.7023	-64.035	-19.788	1.952	6.888
12	7.9531	8.0297	1.0783	7.538	7.144	.1462	.5601	.5509	.4608	.3122	.7059	-64.353	-20.295	.726	7.372
13	8.0533	8.3777	1.0917	7.503	7.419	.1056	.5741	.5742	.4533	.3989	.7035	-64.695	-20.762	-.683	8.124
14	8.1746	8.1307	1.1045	7.462	7.915	.1336	.5853	.5346	.4409	.3876	.6988	-65.065	-21.189	-2.086	9.099
15	8.2872	8.1855	1.1175	7.412	8.490	.1949	.5956	.5346	.4273	.5763	.6938	-65.467	-21.574	-3.679	10.210
16	8.4011	8.2435	1.1304	7.351	8.630	.2427	.6357	.6341	.4152	.5405	.7072	-65.901	-21.907	-5.207	11.375
17	8.3166	8.3075	1.1433	7.273	9.214	.3032	.6899	.6377	.4035	.4913	.7266	-66.363	-22.174	-6.359	12.527
18	8.9344	8.3799	1.1555	7.202	10.581	.3477	.7406	.7179	.3933	.4441	.7414	-66.843	-22.337	-7.060	13.497
19	8.7540	8.4613	1.1599	7.125	12.719	.3747	.7713	.7593	.3847	.4136	.7449	-67.329	-22.307	-7.789	13.953
20	8.3758	8.5537	1.1934	7.050	16.336	.4056	.8101	.8368	.3778	.3755	.7434	-67.820	-21.986	-8.598	13.789
21	9.0000	8.5039	1.1973	6.973	25.240	.4511	.8768	.8735	.3745	.3100	.7582	-68.316	-21.371	-9.607	13.159

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STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.6400	.9153	.353	7.239	.2119	.4852	.4950	.3309	.6737	0.0000	48.817	-7.239	-39.941	.020
2	7.6716	7.6780	.9235	.427	7.339	.2093	.5088	.5007	.3471	.6619	0.0000	47.872	-7.389	-37.069	.020
3	7.7213	7.7170	.9452	-.035	7.548	.2073	.5156	.5157	.3620	.6507	0.0000	47.010	-7.540	-33.984	.019
4	7.7685	7.7566	.9562	-.523	7.711	.2066	.5285	.5286	.3735	.6413	0.0000	46.412	-7.711	-30.736	.018
5	7.8136	7.7975	.9675	-.923	7.879	.2072	.5392	.5393	.3815	.6335	0.0000	45.962	-7.873	-27.562	.016
6	7.8573	7.8395	.9744	-1.242	8.039	.2148	.5521	.5523	.3873	.6239	0.0000	45.616	-8.039	-24.332	.014
7	7.8999	7.8827	.9777	-1.442	8.202	.2225	.5642	.5544	.3917	.6149	0.0000	45.314	-8.202	-21.162	.012
8	7.9420	7.9273	.9797	-1.569	8.302	.2305	.5754	.5755	.3949	.6053	0.0000	45.050	-8.302	-18.061	.010
9	7.9837	7.9732	.9781	-1.656	8.516	.2384	.5852	.5853	.3970	.5989	0.0000	44.845	-8.516	-14.890	.008
10	8.0253	8.0205	.9759	-1.244	8.599	.2442	.5935	.5935	.3974	.5943	0.0000	44.685	-8.659	-11.568	.007
11	8.0672	8.0691	.9750	-.492	8.785	.2518	.6028	.6028	.3965	.5893	0.0000	44.597	-8.786	-7.711	.005
12	8.1096	8.1191	.9722	.225	8.834	.2601	.6117	.6116	.3952	.5847	0.0000	44.582	-8.834	-3.861	.003
13	8.1525	8.1702	.9594	.610	8.951	.2548	.6113	.6110	.3932	.5878	0.0000	44.701	-8.981	-.254	.001
14	8.1961	8.2220	.9535	.840	9.079	.2471	.6086	.6163	.3973	.5921	0.0000	44.343	-9.033	3.020	-.001
15	8.2402	8.2745	.9407	1.078	9.032	.2392	.6051	.6147	.3994	.5968	0.0000	45.244	-9.062	6.570	-.004
16	8.2859	8.3276	.9355	2.905	9.059	.2242	.6002	.5997	.4001	.6072	0.0000	45.531	-9.089	11.254	-.007
17	8.3340	8.3812	.9213	5.637	9.033	.2079	.5943	.5937	.3994	.6198	0.0000	45.836	-9.059	17.528	-.012
18	8.3883	8.4351	.9035	8.304	9.034	.1920	.5844	.5537	.3947	.6349	0.0000	46.378	-9.084	25.182	-.018
19	8.4478	8.4899	.1920	10.359	9.125	.1830	.5700	.5294	.3821	.6564	0.0000	47.404	-9.125	32.989	-.024
20	8.5182	8.5444	.3503	13.652	9.139	.1787	.5482	.5478	.3593	.6723	0.0000	48.801	-9.169	40.326	-.031
21	8.6199	8.6000	.3032	21.019	9.213	.1711	.5113	.5115	.3193	.7098	0.0000	50.814	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	.6	3.0	11.0	13.0	14.0	17.5	18.5	18.5
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.3	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	.6	3.0	11.0	13.0	14.0	17.5	18.5	18.5

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 24

TEST POINT TITLE = 212871515380

FLOW = 19.69 SPEED = 16322.5 PRESSURE RATIO = 2.052 ISENTROPIC EFFY = .7473 POLYTROPIC EFFY = .7714 DEL T/T = .3843

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	ISEN EFFY	----STAGE---- PRESSURE RATIO	ISEN EFFY	FLOW/ (CHOKE FLOW)
1	212871515990	CONVERGED AFTER 24 PASSES	19.698	16322.5	2.271	.865	2.052	.747	.51563

6. TEST POINT 301181015885 (85%)

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PASS  3 STATION  9 STREAMLINE 21 ITERATION  1 VM/VM(MID)= 3.032 VM(MID)= .7332E+03
PASS  3 STATION  9 STREAMLINE 21 ITERATION  2 VM/VM(MID)= 4.679 VM(MID)= .7332E+03
PASS  3 STATION  9 STREAMLINE 21 ITERATION  3 VM/VM(MID)= 4.632 VM(MID)= .7332E+03
PASS  3 STATION  9 STREAMLINE 21 ITERATION  4 VM/VM(MID)= 4.639 VM(MID)= .7332E+03
PASS  3 STATION  9 STREAMLINE 21 ITERATION  5 VM/VM(MID)= 4.702 VM(MID)= .7332E+03
PASS  3 STATION  9 STREAMLINE 21 ITERATION  6 VM/VM(MID)= 4.704 VM(MID)= .7332E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  4 VM/VM(MID)= 3.056 VM(MID)= .7443E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  5 VM/VM(MID)= 3.150 VM(MID)= .7443E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  6 VM/VM(MID)= 3.151 VM(MID)= .7443E+03
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STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0686	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	20.93	0.000	.0737
2	6.2265	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	19.70	0.000	.0737
3	6.3837	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	18.46	0.000	.0737
4	6.5333	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	17.21	0.000	.0737
5	6.6935	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	15.95	0.000	.0737
6	6.8472	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	14.69	0.000	.0737
7	6.9937	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	13.44	0.000	.0737
8	7.1515	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	12.19	0.000	.0737
9	7.3025	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	10.96	0.000	.0737
10	7.4530	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	9.75	0.000	.0737
11	7.6029	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	8.57	0.000	.0737
12	7.7524	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	7.41	0.000	.0737
13	7.9016	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	6.30	0.000	.0737
14	8.0505	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	5.24	0.000	.0737
15	8.1992	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	4.24	0.000	.0737
16	8.3477	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	3.32	0.000	.0737
17	8.4962	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	2.45	0.000	.0737
18	8.6447	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	1.68	0.000	.0737
19	8.7931	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	1.00	0.000	.0737
20	8.9415	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	.44	0.000	.0737
21	9.0900	287.45	0.00	287.45	518.688	511.843	14.695	14.028	.2587	0.00	0.00	0.000	.0737

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	313.50	0.00	313.50	518.688	510.546	14.695	13.904	.2825	0.00	20.83	-285.758	.0732
2	6.5133	315.18	0.00	315.18	518.688	510.458	14.695	13.895	.2840	0.00	19.52	-114.869	.0732
3	6.6503	316.64	0.00	316.64	518.688	510.382	14.695	13.888	.2854	0.00	18.21	-83.688	.0732
4	6.7871	317.91	0.00	317.91	518.688	510.315	14.695	13.882	.2865	0.00	16.90	-67.687	.0731
5	6.9224	318.98	0.00	318.95	518.688	510.258	14.695	13.876	.2875	0.00	15.59	-57.550	.0731
6	7.0570	319.85	0.00	319.85	518.688	510.212	14.695	13.872	.2883	0.00	14.28	-50.385	.0731
7	7.1903	320.51	0.00	320.51	518.688	510.178	14.695	13.869	.2889	0.00	12.98	-44.888	.0731
8	7.3243	320.94	0.00	320.94	518.688	510.155	14.695	13.867	.2893	0.00	11.68	-40.168	.0731
9	7.4575	321.13	0.00	321.13	518.688	510.145	14.695	13.866	.2895	0.00	10.40	-36.171	.0731
10	7.5904	321.05	0.00	321.05	518.688	510.149	14.695	13.866	.2894	0.00	9.13	-32.641	.0731
11	7.7234	320.69	0.00	320.69	518.688	510.168	14.695	13.868	.2891	0.00	7.88	-29.488	.0731
12	7.8555	320.04	0.00	320.04	518.688	510.202	14.695	13.871	.2885	0.00	6.66	-26.656	.0731
13	7.9900	319.07	0.00	319.07	518.688	510.254	14.695	13.876	.2876	0.00	5.47	-24.109	.0731
14	8.1239	317.77	0.00	317.77	518.688	510.322	14.695	13.883	.2864	0.00	4.32	-21.823	.0731
15	8.2585	316.14	0.00	316.14	518.688	510.408	14.695	13.891	.2843	0.00	3.23	-19.771	.0732
16	8.3940	314.15	0.00	314.16	518.688	510.511	14.695	13.901	.2831	0.00	2.19	-17.917	.0732
17	8.5304	311.83	0.00	311.83	518.688	510.632	14.695	13.912	.2810	0.00	1.21	-16.229	.0732
18	8.6681	309.14	0.00	309.14	518.688	510.771	14.695	13.925	.2785	0.00	.31	-14.674	.0733
19	8.8071	306.05	0.00	306.05	518.688	510.927	14.695	13.940	.2757	0.00	-.52	-13.228	.0734
20	8.9476	302.58	0.00	302.58	518.688	511.103	14.695	13.957	.2725	0.00	-1.26	-11.848	.0734
21	9.0900	298.63	0.00	298.63	518.688	511.300	14.695	13.976	.2689	0.00	-1.91	-10.518	.0735

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6015	345.40	0.00	345.40	518.688	508.804	14.696	13.738	.3118	0.00	20.54	-83.831	.0726
2	6.7233	347.70	0.00	347.70	518.688	508.672	14.696	13.726	.3133	0.00	19.15	-81.851	.0725
3	6.8452	349.65	0.00	349.65	518.688	508.547	14.696	13.714	.3153	0.00	17.76	-75.316	.0725
4	6.9655	351.37	0.00	351.37	518.688	508.431	14.696	13.703	.3177	0.00	16.38	-72.348	.0725
5	7.0857	353.57	0.00	353.57	518.688	508.325	14.696	13.693	.3194	0.00	15.00	-64.328	.0724
6	7.2051	355.24	0.00	355.24	518.688	508.233	14.696	13.685	.3209	0.00	13.60	-55.291	.0724
7	7.3241	356.52	0.00	356.52	518.688	508.158	14.696	13.677	.3220	0.00	12.20	-45.447	.0724
8	7.4423	357.44	0.00	357.44	518.688	508.103	14.696	13.672	.3229	0.00	10.79	-38.571	.0723
9	7.5615	357.96	0.00	357.96	518.688	508.072	14.696	13.669	.3233	0.00	9.38	-31.962	.0723
10	7.6812	358.00	0.00	358.00	518.688	508.070	14.696	13.669	.3234	0.00	7.96	-25.617	.0723
11	7.7991	357.53	0.00	357.53	518.688	508.098	14.696	13.672	.3229	0.00	6.55	-22.391	.0723
12	7.9135	356.48	0.00	356.48	518.688	508.160	14.696	13.678	.3220	0.00	5.15	-19.081	.0724
13	8.0345	354.84	0.00	354.84	518.688	508.256	14.696	13.687	.3205	0.00	3.76	-15.494	.0724
14	8.1535	352.59	0.00	352.59	518.688	508.389	14.696	13.699	.3184	0.00	2.41	-14.444	.0724
15	8.2817	349.72	0.00	349.72	518.688	508.556	14.696	13.715	.3157	0.00	1.10	-12.871	.0725
16	8.4031	346.25	0.00	346.25	518.688	508.755	14.696	13.734	.3126	0.00	-.16	-11.636	.0726
17	8.5312	342.24	0.00	342.24	518.688	508.984	14.696	13.755	.3089	0.00	-1.36	-10.699	.0727
18	8.6570	337.75	0.00	337.75	518.688	509.237	14.696	13.779	.3047	0.00	-2.49	-10.082	.0727
19	8.7853	332.87	0.00	332.87	518.688	509.509	14.696	13.805	.3003	0.00	-3.55	-9.493	.0728
20	8.9157	327.65	0.00	327.65	518.688	509.794	14.696	13.832	.2955	0.00	-4.53	-9.163	.0729
21	9.0500	322.12	0.00	322.12	518.688	510.092	14.696	13.861	.2904	0.00	-5.47	-8.690	.0731

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	380.57	0.00	380.57	518.688	506.682	14.696	13.539	.3443	0.00	20.32	-389.854	.0718
2	6.8613	383.58	0.00	383.58	518.688	506.498	14.696	13.522	.3470	0.00	18.99	387.602	.0718
3	6.9713	386.50	0.00	386.50	518.688	506.311	14.696	13.504	.3497	0.00	17.65	163.439	.0717
4	7.0815	389.38	0.00	389.38	518.688	506.126	14.696	13.487	.3524	0.00	16.27	126.498	.0716
5	7.1911	392.14	0.00	392.14	518.688	505.948	14.696	13.470	.3550	0.00	14.86	129.606	.0716
6	7.2999	394.63	0.00	394.63	518.688	505.782	14.696	13.455	.3573	0.00	13.40	187.329	.0715
7	7.4083	396.40	0.00	396.40	518.688	505.637	14.696	13.441	.3594	0.00	11.89	1604.699	.0715
8	7.5164	398.67	0.00	398.67	518.688	505.520	14.696	13.430	.3610	0.00	10.34	-159.024	.0714
9	7.6243	399.88	0.00	399.88	518.688	505.440	14.696	13.423	.3621	0.00	8.75	-65.114	.0714
10	7.7322	400.41	0.00	400.41	518.688	505.405	14.696	13.420	.3625	0.00	7.11	-37.992	.0714
11	7.8405	400.15	0.00	400.15	518.688	505.422	14.696	13.421	.3624	0.00	5.46	-23.962	.0714
12	7.9492	399.04	0.00	399.04	518.688	505.495	14.696	13.428	.3614	0.00	3.80	-19.349	.0714
13	8.0583	397.02	0.00	397.02	518.688	505.629	14.696	13.441	.3595	0.00	2.14	-15.165	.0715
14	8.1635	394.03	0.00	394.03	518.688	505.825	14.696	13.459	.3567	0.00	.49	-12.302	.0715
15	8.2816	390.02	0.00	390.02	518.688	506.085	14.696	13.483	.3530	0.00	-1.13	-10.244	.0716
16	8.3934	385.00	0.00	385.00	518.688	506.407	14.696	13.513	.3483	0.00	-2.70	-8.763	.0717
17	8.5113	379.06	0.00	379.06	518.688	506.784	14.696	13.548	.3428	0.00	-4.17	-7.826	.0719
18	8.6235	372.41	0.00	372.41	518.688	507.198	14.696	13.587	.3367	0.00	-5.51	-7.290	.0720
19	8.7504	365.38	0.00	365.38	518.688	507.627	14.696	13.628	.3302	0.00	-6.68	-7.141	.0722
20	8.8733	358.50	0.00	358.50	518.688	508.040	14.696	13.666	.3239	0.00	-7.63	-7.617	.0723
21	9.0000	352.77	0.00	352.77	518.688	508.378	14.696	13.698	.3186	0.00	-8.25	-10.317	.0724

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.337	6.070	-69.362	3.624	0.0000	1021.5	.9860	1090.11	25.215	605.018	1.000	0.000	1.0000	1.0000
2	-61.333	6.231	-69.723	4.392	0.0000	1038.3	1.0014	1106.91	25.637	607.875	1.000	0.000	1.0000	1.0000
3	-61.709	6.356	-69.931	4.172	0.0000	1055.1	1.0167	1123.63	26.068	610.768	1.000	0.000	1.0000	1.0000
4	-62.092	6.420	-70.032	7.960	0.0000	1071.7	1.0319	1140.25	26.509	613.689	1.000	0.000	1.0000	1.0000
5	-62.357	6.325	-70.134	7.827	0.0000	1088.2	1.0471	1156.74	26.960	616.640	1.000	0.000	1.0000	1.0000
6	-62.636	6.047	-70.340	7.704	0.0000	1104.7	1.0620	1173.10	27.421	619.621	1.000	0.000	1.0000	1.0000
7	-62.904	5.532	-70.535	7.601	0.0000	1121.1	1.0769	1189.30	27.892	622.633	1.000	0.000	1.0000	1.0000
8	-63.173	4.935	-70.735	7.512	0.0000	1137.5	1.0915	1205.31	28.375	625.681	1.000	0.000	1.0000	1.0000
9	-63.447	4.105	-70.935	7.439	0.0000	1153.8	1.1059	1221.13	28.871	628.769	1.000	0.000	1.0000	1.0000
10	-63.731	3.109	-71.110	7.375	0.0000	1170.1	1.1201	1236.75	29.380	631.901	1.000	0.000	1.0000	1.0000
11	-64.031	1.935	-71.303	7.333	0.0000	1186.5	1.1340	1252.17	29.904	635.085	1.000	0.000	1.0000	1.0000
12	-64.348	.778	-71.549	7.301	0.0000	1203.0	1.1476	1267.43	30.444	638.329	1.000	0.000	1.0000	1.0000
13	-64.688	-.552	-71.865	7.250	0.0000	1219.6	1.1613	1282.55	31.004	641.542	1.000	0.000	1.0000	1.0000
14	-65.054	-2.014	-72.322	7.268	0.0000	1236.3	1.1747	1297.57	31.594	645.033	1.000	0.000	1.0000	1.0000
15	-65.451	-3.630	-72.714	7.263	0.0000	1253.3	1.1879	1312.55	32.188	648.514	1.000	0.000	1.0000	1.0000
16	-65.879	-5.137	-73.141	7.262	0.0000	1270.5	1.2011	1327.54	32.819	652.096	1.000	0.000	1.0000	1.0000
17	-66.335	-6.317	-73.531	7.265	0.0000	1288.0	1.2143	1342.65	33.473	655.794	1.000	0.000	1.0000	1.0000
18	-66.911	-7.035	-74.034	7.273	0.0000	1305.9	1.2277	1357.99	34.171	659.619	1.000	0.000	1.0000	1.0000
19	-67.293	-7.838	-74.575	7.275	0.0000	1324.2	1.2414	1373.70	34.900	663.581	1.000	0.000	1.0000	1.0000
20	-67.799	-8.541	-75.053	7.254	0.0000	1342.9	1.2556	1389.94	35.667	667.587	1.000	0.000	1.0000	1.0000
21	-68.316	-9.637	-75.479	7.163	0.0000	1352.0	1.2705	1406.93	36.473	671.335	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	----VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8973	411.30	150.04	441.34	546.356	530.230	17.437	15.753	.3903	21.26	22.32	6.199	.0799
2	6.9932	413.38	150.02	442.40	546.057	529.853	17.453	15.710	.3914	20.65	20.72	7.297	.0797
3	7.0937	416.75	152.55	443.83	545.850	529.540	17.433	15.675	.3927	20.12	19.07	9.059	.0796
4	7.1933	419.73	149.90	445.77	545.746	529.294	17.413	15.646	.3945	19.66	17.35	12.188	.0795
5	7.2973	423.09	147.93	448.20	545.746	529.113	17.411	15.625	.3965	19.27	15.59	18.744	.0794
6	7.3937	426.43	146.45	450.38	545.834	529.003	17.423	15.611	.3992	18.95	13.76	39.584	.0793
7	7.4925	429.51	145.51	453.49	546.013	528.955	17.439	15.606	.4015	18.72	11.89	-693.386	.0793
8	7.5839	432.13	144.97	455.79	546.251	529.060	17.461	15.609	.4035	18.55	9.96	-37.741	.0793
9	7.6846	434.16	144.67	457.63	546.551	529.212	17.483	15.620	.4051	18.43	8.00	-20.182	.0794
10	7.7900	435.19	145.33	458.51	547.026	529.598	17.513	15.639	.4060	18.47	6.00	-14.194	.0794
11	7.8736	434.97	147.13	459.18	547.728	530.272	17.543	15.665	.4060	18.63	4.00	-11.278	.0794
12	7.9716	433.31	148.85	458.73	548.425	531.004	17.573	15.698	.4054	18.93	2.02	-9.636	.0795
13	8.0635	431.77	150.56	457.27	549.133	531.823	17.605	15.736	.4038	19.22	.06	-8.674	.0795
14	8.1664	428.43	152.11	454.63	549.820	532.708	17.623	15.779	.4011	19.55	-1.85	-8.139	.0796
15	8.2633	423.76	153.20	450.61	550.424	533.615	17.641	15.824	.3972	19.88	-3.71	-7.916	.0797
16	8.3674	416.82	155.70	444.93	551.337	534.948	17.641	15.871	.3917	20.40	-5.46	-7.959	.0798
17	8.4716	407.59	159.91	437.47	552.427	536.565	17.621	15.917	.3846	21.30	-7.03	-8.311	.0797
18	8.5739	396.38	160.53	427.79	553.279	538.131	17.591	15.960	.3755	21.89	-8.35	-9.179	.0797
19	8.6922	383.45	159.41	415.27	553.412	539.137	17.531	15.997	.3642	22.57	-9.32	-11.204	.0798
20	8.8036	367.24	155.94	399.37	553.335	540.133	17.437	16.022	.3493	23.14	-9.81	-17.467	.0797
21	8.9340	345.12	153.92	377.39	553.149	541.329	17.291	16.028	.3307	24.04	-9.38	-1665.883	.0796

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	CHAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-8.348	4.233	[illegible]	5.097	.0155	1043.9	.4621	974.84	25.542	508.828	1.191	.053	.9570	.9580
2	-9.434	4.234	-52.375	5.337	.0159	1059.2	.3789	993.54	25.372	511.490	1.188	.053	.9553	.9564
3	-9.833	4.170	-59.571	5.779	.0170	1074.4	.3951	1011.59	25.355	514.168	1.185	.052	.9538	.9549
4	[illegible]	3.735	[illegible]	5.523	.0170	1089.5	.9108	1029.04	26.772	516.961	1.185	.052	.9526	.9537
5	[illegible]	3.229	[illegible]	[illegible]	.0170	1104.4	.9259	1045.86	27.133	519.565	1.185	.052	.9517	.9528
6	-60.435	[illegible]	[illegible]	5.344	.0170	1119.2	.9403	1062.12	27.600	522.281	1.186	.052	.9510	.9522
7	-61.252	[illegible]	[illegible]	5.230	.0171	1133.9	.9541	1077.66	28.021	525.006	1.187	.053	.9508	.9512
8	-61.555	2.243	[illegible]	5.136	.0174	1145.4	.9672	1092.55	28.447	527.750	1.188	.053	.9487	.9499
9	-61.542	1.975	[illegible]	5.055	.0175	1152.9	.9739	1105.94	28.931	530.512	1.190	.054	.9476	.9488
10	-52.117	1.539	-57.135	5.019	.0199	1177.4	.9910	1120.03	29.233	533.301	1.192	.055	.9410	.9424
11	-62.834	1.322	-67.535	5.101	.0245	1191.3	1.0007	1131.64	29.573	536.128	1.194	.056	.9274	.9292
12	[illegible]	.791	[illegible]	5.012	.0279	1206.4	1.0101	1143.07	30.054	539.003	1.196	.057	.9146	.9167
13	-52.979	.150	-59.335	[illegible]	.0347	1221.0	1.0192	1154.25	30.453	541.335	1.198	.059	.9013	.9038
14	-53.301	-.332	[illegible]	5.129	.0385	1235.8	1.0281	1165.33	30.871	544.337	1.199	.050	.8878	.8906
15	-3.532	[illegible]	[illegible]	5.233	.0431	1250.3	1.0372	1176.64	31.297	548.022	1.200	.051	.8747	.8779
16	-54.040	-1.345	-69.423	5.358	.0520	1266.2	1.0444	1186.20	31.659	651.210	1.200	.053	.8502	.8540
17	[illegible]	-1.731	-70.354	5.507	.0639	1282.1	1.0503	1194.51	31.979	554.529	1.199	.065	.8186	.8232
18	-54.935	-1.512	-70.739	[illegible]	.0747	1298.4	1.0575	1204.01	32.341	558.005	1.197	.057	.7895	.7948
19	-55.493	-1.996	-71.544	5.193	.0802	1315.4	1.0681	1217.93	32.939	561.765	1.193	.067	.7712	.7769
20	[illegible]	-2.303	-72.551	[illegible]	.0895	1333.2	1.0797	1232.23	33.359	565.541	1.187	.057	.7469	.7549
21	[illegible]	-3.111	-73.930	7.235	.0955	1352.3	1.0913	1245.80	33.343	569.704	1.176	.056	.7143	.7208

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.132 ISEN. EFF.= .979 POLY. EFF.= .682 DELTA T ON T = .058

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0734	465.77	334.24	573.29	577.955	550.766	21.151	17.952	.4975	35.66	24.47	68.453	.0872
2	7.1633	459.70	329.74	573.40	577.870	550.623	21.131	17.939	.4981	35.07	22.59	59.812	.0871
3	7.2434	473.74	325.57	574.32	577.903	550.463	21.115	17.914	.4993	34.50	20.64	50.380	.0870
4	7.3311	474.00	321.60	574.11	577.755	550.297	21.101	17.788	.5001	33.93	18.62	41.842	.0869
5	7.4143	482.49	317.93	577.73	577.714	550.100	21.099	17.751	.5017	33.37	16.57	33.815	.0869
6	7.4933	487.14	314.14	579.93	577.675	549.541	21.073	17.731	.5034	32.62	14.50	27.000	.0867
7	7.5737	491.73	313.41	541.72	577.678	549.633	21.059	17.700	.5053	32.23	12.41	21.530	.0866
8	7.6533	495.35	307.57	535.93	577.683	549.505	21.055	17.563	.5070	31.61	10.33	17.293	.0864
9	7.7337	494.33	304.12	534.37	577.629	549.330	21.035	17.537	.5032	31.33	8.24	14.121	.0863
10	7.8153	501.54	302.00	[illegible]	577.321	549.493	21.002	17.606	.5035	31.06	6.17	11.802	.0861
11	7.8934	500.50	301.52	584.41	574.350	550.047	20.951	17.575	.5074	31.07	4.11	10.146	.0859
12	7.9774	499.35	300.44	581.31	578.729	550.716	20.891	17.545	.5059	31.09	2.10	9.010	.0857
13	8.0547	494.25	299.33	577.44	579.031	551.433	20.791	17.518	.5003	31.16	.12	8.270	.0854
14	8.1453	495.02	295.31	571.13	579.235	552.246	20.691	17.494	.4950	31.31	-1.80	7.846	.0852
15	8.2237	479.53	293.37	552.41	579.271	553.106	20.551	17.475	.4870	31.50	-3.67	7.718	.0849
16	8.3193	469.00	294.51	551.32	580.081	554.339	20.401	17.464	.4750	32.30	-5.44	7.878	.0846
17	8.4125	447.21	297.71	537.25	581.425	557.552	20.223	17.461	.4634	33.65	-7.04	8.356	.0842
18	8.5122	423.92	293.73	516.50	582.382	560.139	20.025	17.458	.4453	35.17	-8.37	9.334	.0838
19	8.6193	390.95	292.55	483.13	581.871	561.754	19.792	17.455	.4238	35.40	-9.36	11.566	.0837
20	8.7337	351.57	285.94	451.21	581.258	563.666	19.595	17.311	.3957	38.31	-9.86	15.877	.0835
21	8.8574	311.31	290.50	419.11	581.020	566.494	19.175	17.347	.3555	42.03	-9.36	1065.883	.0833

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BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.585	2.458	-57.706	5.201	.0341	1071.2	.7565	871.88	26.037	613.398	1.439	.116	[illegible]	[illegible]
2	[illegible]	[illegible]	-58.032	5.006	[illegible]	1084.1	.7718	888.63	[illegible]	[illegible]	[illegible]	.116	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	4.819	.0343	1096.9	.7857	[illegible]	26.778	[illegible]	[illegible]	.116	[illegible]	[illegible]
4	[illegible]	[illegible]	-58.757	4.618	.0342	1109.5	.8001	921.59	27.112	[illegible]	[illegible]	.116	[illegible]	[illegible]
5	[illegible]	[illegible]	-59.039	4.436	.0341	1122.0	.8143	937.85	27.459	[illegible]	1.435	.116	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	4.270	.0340	1134.4	.8285	953.98	27.808	[illegible]	[illegible]	.116	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	4.127	[illegible]	1146.6	.8423	969.72	28.126	[illegible]	[illegible]	.116	[illegible]	[illegible]
8	-55.753	-.319	-59.772	4.019	.0347	1158.7	.8558	985.11	28.384	[illegible]	[illegible]	.116	[illegible]	[illegible]
9	[illegible]	-.237	-60.039	3.960	.0352	[illegible]	[illegible]	1000.36	28.857	[illegible]	[illegible]	.116	[illegible]	[illegible]
10	[illegible]	-.219	[illegible]	3.964	.0396	[illegible]	[illegible]	1013.54	[illegible]	[illegible]	1.429	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	.0490	[illegible]	[illegible]	[illegible]	29.373	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	.146	[illegible]	4.224	.0579	1207.2	[illegible]	1034.70	29.601	639.176	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	.475	-61.775	4.494	.0673	1219.7	.9063	1045.06	29.826	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	.0778	1232.4	.9145	1055.22	[illegible]	[illegible]	[illegible]	.117	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	5.335	.0863	[illegible]	[illegible]	1065.55	[illegible]	[illegible]	[illegible]	.117	[illegible]	[illegible]
16	[illegible]	[illegible]	-64.208	5.920	.1043	[illegible]	[illegible]	1071.01	30.301	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	2.530	-65.369	6.652	.1232	1273.1	.9255	1073.02	30.361	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	7.535	[illegible]	1288.2	.9263	1076.42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	8.750	.1609	1304.3	.9339	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	-70.745	10.179	.1733	1322.0	.9414	1097.42	30.992	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	-61.540	4.918	-73.653	12.113	.1931	1342.0	.9465	1106.10	31.232	567.485	1.385	.120	.6963	[illegible]

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.403 ISEN. EFF.= .870 POLY. EFF.= .876 DELTA T ON T = .117

STATION 7 FLOW FIELD DESCRIP.

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	364.63	511.62	761.95	611.785	563.719	25.632	19.241	.6536	42.18	24.07	59.518	[illegible]
2	7.3321	378.31	503.20	761.93	611.425	563.446	25.574	19.196	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	761.94	611.385	563.319	25.541	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	761.90	[illegible]	[illegible]	25.524	19.157	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	761.81	611.346	[illegible]	25.520	19.156	.6537	[illegible]	16.24	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	761.71	[illegible]	[illegible]	25.527	19.164	.6535	[illegible]	14.16	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	761.77	611.756	[illegible]	25.543	19.182	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	761.80	612.146	[illegible]	25.573	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	612.566	564.640	[illegible]	19.244	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	481.37	760.47	[illegible]	565.690	25.643	19.289	[illegible]	[illegible]	6.34	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	615.076	[illegible]	[illegible]	19.342	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	755.24	[illegible]	[illegible]	25.654	[illegible]	[illegible]	[illegible]	2.68	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.634	19.476	.6393	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	743.35	619.565	[illegible]	25.567	19.556	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	733.66	[illegible]	[illegible]	[illegible]	19.647	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.251	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	630.291	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	631.537	[illegible]	[illegible]	20.256	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	287.78	[illegible]	595.85	633.610	604.384	24.186	[illegible]	[illegible]	61.12	-9.37	[illegible]	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-46.150	5.702	.0515	1099.0	.6959	814.73	26.553	518.576	1.744	.179	.9583	.9615
2	-41.091	1.231	-46.351	5.471	.0513	1109.6	.7130	830.96	26.934	520.510	1.740	.179	.9570	.9602
3	-41.723	.934	-47.130	5.433	.0513	1120.0	.7258	845.75	27.212	522.428	1.739	.179	.9559	.9592
4	-42.337	.139	-47.543	5.305	.0515	1130.3	.7375	859.40	27.431	524.336	1.737	.179	.9548	.9582
5	-42.933	-.645	-48.111	5.173	.0513	1140.4	.7484	872.22	27.773	526.240	1.737	.179	.9539	.9573
6	-43.507	-1.232	-48.733	5.047	.0510	1150.5	.7583	884.30	28.057	528.144	1.737	.179	.9531	.9566
7	-44.042	-1.235	-49.331	4.943	.0514	1160.5	.7682	895.53	28.335	530.053	1.738	.179	.9517	.9553
8	-44.541	-1.079	-49.435	4.367	.0521	1170.5	.7767	905.84	28.512	531.971	1.741	.180	.9500	.9538
9	-45.019	-.719	-50.135	4.325	.0523	1180.5	.7848	915.64	28.932	533.902	1.743	.181	.9484	.9522
10	-45.475	-.230	-50.249	4.343	.0534	1190.4	.7892	921.62	29.034	535.856	1.745	.183	.9411	.9455
11	-45.882	.324	-50.321	4.938	.0735	1200.5	.7898	922.04	29.152	537.846	1.746	.186	.9264	.9319
12	-46.298	1.033	-51.431	5.137	.0803	1210.3	.7882	923.40	29.225	539.887	1.746	.189	.9120	.9186
13	-46.703	1.935	-52.134	5.451	.1010	1221.3	.7866	923.30	29.299	541.985	1.744	.192	.8967	.9044
14	-47.117	3.031	-53.041	5.924	.1155	1232.0	.7842	922.30	29.342	544.163	1.741	.194	.8806	.8895
15	-47.531	4.172	-54.117	6.525	.1233	1243.1	.7817	921.36	29.406	546.426	1.736	.197	.8645	.8746
16	-47.952	5.453	-55.457	7.494	.1533	1254.7	.7701	910.71	29.224	548.814	1.728	.202	.8356	.8477
17	-48.440	6.539	-57.155	8.778	.1921	1267.1	.7512	892.41	28.956	551.389	1.718	.209	.7983	.8130
18	-48.996	8.131	-59.333	10.343	.2245	1280.9	.7338	875.65	28.575	554.221	1.706	.215	.7630	.7808
19	-49.542	9.620	-62.23	12.563	.2412	1295.9	.7289	872.41	28.533	557.374	1.686	.216	.7420	.7601
20	-50.395	10.322	-65.539	13.304	.2601	1312.1	.7236	863.07	28.593	560.958	1.663	.218	.7173	.7367
21	-51.301	10.840	-70.447	13.955	.2835	1332.0	.7126	853.85	28.522	565.286	1.640	.222	.6836	.7047

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.725 ISEN. EFF.= .871 POLY. EFF.= .880 DELTA T ON T = .193

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	736.43	677.00	1002.13	644.862	561.905	30.651	18.897	.8611	42.50	19.79	-2.220	.0904
2	7.4932	728.55	673.95	994.52	645.081	553.992	30.751	19.127	.8529	42.90	17.70	-2.407	.0912
3	7.5473	718.17	677.04	987.67	646.530	555.942	30.877	19.348	.8455	43.28	15.72	-2.637	.0919
4	7.5972	710.20	675.92	981.13	647.345	557.851	30.991	19.558	.8399	43.63	13.82	-2.918	.0926
5	7.6472	702.30	675.44	975.09	648.099	559.585	31.074	19.754	.8322	43.93	12.00	-3.263	.0932
6	7.6973	695.32	675.67	969.74	648.805	571.184	31.137	19.935	.8263	44.18	10.26	-3.686	.0938
7	7.7433	689.05	675.29	964.73	649.591	572.735	31.230	20.103	.8211	44.42	8.59	-4.213	.0944
8	7.8013	683.92	677.40	960.31	650.481	574.243	31.395	20.260	.8153	44.66	6.99	-4.885	.0949
9	7.8524	678.92	675.03	957.83	651.416	575.666	31.511	20.408	.8132	44.86	5.42	-5.777	.0953
10	7.9052	671.09	683.33	954.72	652.974	577.726	31.597	20.548	.8091	45.34	3.91	-7.025	.0956
11	7.9533	659.20	693.31	951.23	655.424	580.726	31.644	20.681	.8041	46.22	2.45	-9.903	.0957
12	8.0143	645.35	694.32	947.52	657.875	583.71	31.695	20.810	.7932	47.09	1.03	-12.031	.0958
13	8.0723	630.91	701.32	943.72	650.376	586.381	31.599	20.936	.7933	48.05	-.34	-16.579	.0959
14	8.1313	614.30	705.53	937.79	652.784	590.217	31.667	21.061	.7863	49.09	-1.70	-42.899	.0959
15	8.1924	595.62	713.22	929.09	654.817	595.601	31.553	21.186	.7755	50.14	-3.04	173.448	.0960
16	8.2530	560.59	723.04	917.43	655.624	599.190	31.347	21.316	.7630	52.31	-4.36	32.158	.0956
17	8.3294	511.03	747.00	905.08	674.256	606.711	31.114	21.461	.7486	55.62	-5.67	20.442	.0951
18	8.4035	455.15	753.85	891.75	673.909	614.360	30.904	21.629	.7330	59.31	-6.61	17.667	.0947
19	8.5033	407.13	759.27	870.30	692.161	619.732	30.537	21.824	.7124	62.11	-7.87	13.623	.0947
20	8.6057	343.13	775.51	850.06	635.506	625.969	30.354	22.050	.6923	65.82	-8.90	37.084	.0947
21	8.7335	264.45	799.54	842.14	693.244	634.535	30.433	22.319	.6511	71.70	-9.37	********	.0945

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.839	-31.338	7.214	.0633	1127.3	.7435	865.33	27.269	623.782	2.086	.243	.9579	.9620
2	-24.930	2.333	-32.142	7.212	.0683	1134.7	.7379	860.44	27.459	625.167	2.093	[illegible]	[illegible]	[illegible]
3	-25.594	2.726	-32.301	7.207	.0685	1142.2	.7331	856.32	27.652	[illegible]	2.101	[illegible]	[illegible]	[illegible]
4	-26.456	2.238	-33.352	7.198	.0685	1149.7	.7292	853.18	27.891	[illegible]	2.109	[illegible]	[illegible]	[illegible]
5	-27.216	1.633	-34.333	7.182	.0633	1157.3	.7264	851.13	28.056	[illegible]	2.116	[illegible]	[illegible]	[illegible]
6	-27.373	1.205	-35.131	7.158	.0680	1164.9	.7246	850.20	28.266	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-28.693	1.136	-35.321	7.128	.0684	1172.6	.7232	843.79	28.470	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	-29.359	1.274	-36.460	7.101	.0695	1180.4	.7224	843.86	28.669	[illegible]	2.136	[illegible]	[illegible]	[illegible]
9	-29.370	1.609	-37.056	7.086	.0704	1188.3	.7222	850.72	28.874	[illegible]	2.144	[illegible]	[illegible]	[illegible]
10	-30.330	2.032	-37.523	7.093	.0731	1196.3	.7180	847.28	28.961	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	-31.046	2.737	-38.135	7.137	.0973	1204.5	.7070	837.33	28.931	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	-31.530	3.554	-39.734	7.254	.1155	1212.9	.6980	827.89	28.806	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	-31.980	4.535	-34.431	7.501	.1345	1221.5	.6873	817.42	28.708	642.044	2.157	.273	[illegible]	[illegible]
14	-32.403	5.737	-40.353	7.350	.1533	1230.5	.6759	806.09	28.532	[illegible]	2.154	[illegible]	[illegible]	[illegible]
15	-32.801	7.130	-41.431	8.690	.1724	1239.8	.6646	794.89	28.433	[illegible]	2.147	[illegible]	[illegible]	[illegible]
16	-33.183	8.531	-43.331	9.849	.2033	1249.7	.6386	767.32	28.038	[illegible]	2.133	[illegible]	[illegible]	[illegible]
17	-33.374	10.129	-45.138	11.564	.2550	1260.5	.5992	724.46	27.348	650.013	2.117	.300	[illegible]	[illegible]
18	-34.010	11.626	-43.319	14.008	.2932	1272.7	.5594	680.45	26.740	652.562	2.103	.311	[illegible]	[illegible]
19	-34.486	12.838	-51.790	17.304	.3214	1286.5	.5387	659.20	26.581	655.468	[illegible]	[illegible]	[illegible]	[illegible]
20	-34.372	13.338	-56.542	21.570	.3403	1302.3	.5143	631.45	26.402	658.845	2.066	[illegible]	[illegible]	[illegible]
21	-35.[illegible]	13.234	-63.154	27.536	.3801	1322.0	.4736	585.59	26.018	663.183	2.071	.337	.6841	.7143

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.122 ISEN. EFF.= .868 POLY. EFF.= .881 DELTA T ON T = .275

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5433	776.70	873.45	1172.57	634.470	571.035	37.572	19.868	.9934	48.52	10.63	-2.464	[illegible]
2	7.5875	764.44	874.15	1161.25	634.480	573.231	37.523	20.113	.9879	48.83	9.81	-3.263	[illegible]
3	7.6231	759.[illegible]7	863.77	1151.73	634.488	575.061	37.487	20.316	.9733	49.04	[illegible]	[illegible]	[illegible]
4	7.6653	747.57	853.30	1143.70	634.493	576.589	37.447	20.483	.9702	49.16	[illegible]	[illegible]	[illegible]
5	7.7061	742.77	860.77	1135.94	634.494	577.865	37.403	20.622	.9634	49.21	7.39	[illegible]	[illegible]
6	7.7474	733.39	855.17	1131.25	634.493	578.932	37.372	20.735	.9577	49.12	[illegible]	[illegible]	[illegible]
7	7.7835	730.75	851.51	1126.00	634.488	579.907	37.315	20.827	.9524	49.13	5.77	[illegible]	[illegible]
8	7.8325	734.81	846.73	1121.19	634.478	580.796	37.243	20.900	.9473	49.05	4.96	[illegible]	[illegible]
9	7.8753	734.03	842.02	1117.03	634.466	581.545	37.171	20.955	.9433	48.92	4.15	[illegible]	[illegible]
10	7.9211	728.54	840.70	1112.45	635.145	583.075	37.031	20.996	.9354	49.09	[illegible]	[illegible]	[illegible]
11	7.9673	713.09	844.13	1106.70	636.795	585.758	36.795	21.026	.9314	49.71	[illegible]	[illegible]	[illegible]
12	8.0154	703.06	847.44	1101.11	638.465	588.485	36.555	21.048	.9246	50.32	1.71	[illegible]	[illegible]
13	8.0634	689.55	852.04	1096.03	630.563	591.415	36.341	21.064	.9165	51.04	[illegible]	[illegible]	[illegible]
14	8.1175	673.14	853.41	1092.35	633.035	594.571	36.143	21.078	.9131	51.85	.86	5.741	[illegible]
15	8.1720	660.26	863.37	1089.05	635.554	597.795	35.943	21.090	.9074	[illegible]	[illegible]	5.363	[illegible]
16	8.2233	625.69	887.35	1086.33	701.157	603.915	35.707	21.109	.9000	[illegible]	-1.76	[illegible]	[illegible]
17	8.2937	571.89	920.33	1083.59	709.375	612.668	35.434	21.146	.8920	58.15	[illegible]	[illegible]	[illegible]
18	8.3606	508.00	951.93	1078.97	717.594	621.755	35.151	21.216	.8817	61.91	-3.37	[illegible]	[illegible]
19	8.4438	465.71	965.53	1072.38	722.631	627.902	34.994	21.324	.8725	64.27	-5.34	[illegible]	[illegible]
20	8.5434	406.19	983.30	1054.23	728.500	635.389	34.795	21.476	.8604	67.56	-7.04	[illegible]	[illegible]
21	8.6633	280.87	1011.30	1049.58	737.550	646.983	34.495	21.725	.8410	74.48	-8.95	20.749	[illegible]

BLADE DATA

LOCATION	BLADE ANGLES SECTION	BLADE ANGLES LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.047	10.931	-13.779	9.132	.0891	1142.5	.5992	820.37	27.234	626.536	2.557	.320	.9585	.9636
2	-13.330	11.032	-19.[illegible]	9.333	.0653	1148.2	.5909	812.09	27.507	627.712	2.554	.320	.9571	.9624
3	-14.134	13.279	-20.[illegible]	9.531	.0853	1154.1	.5852	809.73	27.807	628.321	2.551	.320	.9558	.9612
4	-14.373	9.638	-21.911	9.537	.0832	1160.1	.5819	803.86	27.935	629.364	2.548	.320	.9545	.9601
5	-15.325	8.950	-22.331	9.725	.0949	1166.2	.5805	803.11	28.103	631.139	2.546	.320	.9533	.9590
6	-15.392	8.171	-23.124	8.759	.0845	1172.4	.5808	804.18	28.271	632.344	2.543	.320	.9522	.9580
7	-17.145	7.922	-23.953	9.917	.0892	1178.6	.5819	800.17	28.424	633.581	2.539	.320	.9505	.9565
8	-17.955	7.040	-24.[illegible]	9.880	.0855	1185.3	.5836	809.04	28.570	634.850	2.534	.320	.9483	.9545
9	-19.303	9.730	-24.[illegible]	9.394	.0874	1191.7	.5859	813.27	28.723	636.150	2.529	.320	.9461	.9526
10	-19.093	9.690	-25.175	7.775	.0933	1199.7	.5848	811.70	28.7[illegible]	637.486	2.520	.321	.9379	.9453
11	-19.631	9.421	-25.934	7.173	.1224	1205.7	.5749	801.54	28.513	638.973	2.504	.324	.9213	.9307
12	-20.123	7.2[illegible]	-27.071	7.344	.1449	1213.0	.5654	792.41	28.317	640.323	2.487	.327	.9049	.9161
13	-20.594	7.922	-25.[illegible]	7.437	.1633	1220.5	.5547	781.58	28.092	641.842	2.473	.331	.8872	.9005
14	-21.301	9.344	-25.[illegible]	7.0[illegible]	.1924	1229.4	.5428	769.42	27.822	643.435	2.459	.336	.8686	.8840
15	-21.340	9.333	-29.[illegible]	7.327	.2153	1236.7	.5309	757.17	27.555	645.111	2.446	.341	.8502	.8676
16	-21.[illegible]	11.134	-29.[illegible]	8.035	.2613	1245.4	.4984	721.77	26.882	646.303	2.430	.352	.8171	.8382
17	-21.[illegible]	12.295	-30.[illegible]	8.395	.3133	1255.1	.4454	662.63	25.979	648.392	2.411	.368	.7741	.7999
18	-22.191	13.339	-31.739	9.584	.3739	1266.1	.4381	597.33	24.964	651.185	2.393	.383	.7346	.7646
19	-22.193	13.933	-33.[illegible]	11.583	.4319	1278.7	.4359	563.66	24.[illegible]	653.326	2.381	.393	.7119	.7442
20	-21.371	13.934	-37.804	19.437	.4332	1293.2	.4129	510.68	24.145	656.891	2.368	.405	.6666	.7215
21	-21.371	15.133	-4[illegible]	29.583	.4825	1312.0	.3297	411.49	23.420	660.936	2.347	.422	.6507	.6832

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.475 ISEN. EFF.= .857 POLY. EFF.= .874 DELTA T ON T = .343

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.574	713.85	87[illegible]	1130.73	654.470	578.397	37.572	20.857	.9572	50.74	7.82	9.349	.0968
2	7.61[illegible]	714.47	870.[illegible]	1125.12	654.480	579.745	37.521	20.927	.9533	50.62	7.46	9.791	.0970
3	7.6557	715.33	85[illegible]	1124.03	654.489	580.[illegible]	37.48[illegible]	20.958	.9503	50.41	7.76	10.691	.0971
4	7.6934	718.34	851.62	1122.17	654.493	580.523	37.447	20.991	.9485	50.16	7.58	11.574	.0972
5	7.7433	722.27	855.97	1120.[illegible]	654.434	580.[illegible]	37.404	21.003	.9472	49.97	7.33	12.140	.0972
6	7.7623	725.33	852.34	1119.53	654.493	581.104	37.372	21.009	.9460	49.58	7.06	12.328	.0972
7	7.8742	728.33	84[illegible]	1118.01	654.430	581.389	37.315	21.014	.9445	49.31	6.75	12.169	.0972
8	7.9552	731.15	843.17	1116.03	654.479	581.744	37.243	21.020	.9425	49.07	6.42	11.712	.0971
9	7.9033	733.34	833.62	1114.03	654.406	582.101	37.171	21.026	.9400	48.83	6.08	11.022	.0971
10	7.9535	723.73	837.55	1110.93	645.145	583.359	37.031	21.032	.9359	48.93	5.73	10.200	.0969
11	7.9942	713.09	841.31	1106.13	635.735	585.399	35.735	21.040	.9303	49.52	5.35	9.347	.0965
12	8.0333	705.40	844.93	1101.07	638.465	538.492	36.525	21.049	.9240	50.17	4.95	8.508	.0962
13	8.0943	692.42	850.53	1096.74	630.563	591.379	35.341	21.060	.9188	50.85	4.51	7.714	.0957
14	8.1324	677.35	857.83	1091.04	613.035	594.543	36.141	21.074	.9132	51.70	4.02	6.977	.0953
15	8.1815	561.34	850.05	1035.57	635.554	597.822	35.942	21.094	.9073	52.60	3.46	6.380	.0949
16	8.2337	525.15	87[illegible]	1035.01	731.157	604.044	35.707	21.125	.8933	54.79	2.79	5.694	.0948
17	8.2433	565.37	920.75	1032.03	709.375	612.342	35.434	21.179	.8903	59.31	1.92	5.182	.0929
18	8.3551	433.93	953.27	1037.37	717.594	622.217	35.151	21.271	.8733	62.32	.70	4.881	.0919
19	8.4300	451.32	955.[illegible]	1039.49	722.531	629.591	34.934	21.406	.8638	65.00	-.98	4.537	.0916
20	8.5132	384.49	955.73	1039.35	723.260	636.295	34.795	21.554	.8559	68.71	-3.22	4.241	.0912
21	8.5333	252.52	1014.51	1045.76	737.550	647.643	34.435	21.904	.8373	76.03	-6.18	3.853	.0905

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6133	754.27	370.33	1151.73	684.470	575.842	37.572	20.362	.9703	49.09	9.86	26.367	[illegible]
2	7.6698	762.45	364.77	1166.21	684.480	572.776	37.529	19.996	.9930	47.85	8.88	70.[illegible]	[illegible]
3	7.7181	887.75	359.40	1179.42	684.488	569.783	37.487	19.662	1.0064	46.77	8.59	-224.[illegible]	[illegible]
4	7.7644	928.16	354.30	1189.92	684.493	567.608	37.447	19.395	1.0171	45.89	8.25	-59.7[illegible]	[illegible]
5	7.8087	943.54	349.46	1197.14	684.494	566.246	37.403	19.283	1.0247	45.20	7.98	-38.443	[illegible]
6	7.8518	954.76	344.73	1201.78	684.493	565.322	37.372	19.075	1.0295	44.66	7.57	[illegible]	[illegible]
7	7.8941	962.14	840.24	1203.86	684.488	564.903	37.315	18.997	1.0316	44.26	7.27	[illegible]	[illegible]
8	7.9336	866.52	335.75	1203.91	684.478	564.865	37.243	18.959	1.0317	43.97	7.02	[illegible]	[illegible]
9	7.9771	968.95	831.33	1202.62	684.466	565.130	37.171	18.953	1.0303	43.73	6.83	-32.[illegible]	[illegible]
10	8.0182	965.36	830.52	1199.42	685.145	566.448	37.031	19.278	1.0264	43.92	6.64	-48.[illegible]	[illegible]
11	8.0597	954.18	934.47	1194.14	686.795	569.152	36.795	19.[illegible]	1.0195	44.33	6.55	-90.[illegible]	[illegible]
12	8.1017	941.77	338.42	1188.07	688.465	572.026	36.556	19.054	1.0118	44.69	6.44	-126.960	[illegible]
13	8.1444	927.45	344.36	1182.23	690.563	575.283	36.341	19.116	1.0040	45.58	6.32	302.[illegible]	[illegible]
14	8.1878	911.21	352.04	1176.45	693.835	578.896	36.143	19.[illegible]	.9960	46.41	6.16	61.467	[illegible]
15	8.2321	793.37	353.75	1169.88	695.554	582.783	35.942	19.2[illegible]	.9872	47.30	6.08	32.016	[illegible]
16	8.2779	759.22	882.20	1163.31	701.157	589.490	35.707	19.391	.9765	49.28	5.78	21.274	[illegible]
17	8.3265	705.66	916.71	1156.86	709.375	599.109	35.434	19.547	.9623	52.41	5.14	16.276	[illegible]
18	8.3806	639.62	950.30	1145.51	717.594	609.536	35.161	19.786	.9453	56.86	4.11	13.773	[illegible]
19	8.4408	580.22	967.53	1126.19	722.831	617.855	34.994	20.148	.9248	59.05	2.44	12.580	[illegible]
20	8.5118	487.13	927.53	1101.14	728.560	628.795	34.795	20.703	.8948	63.74	-.09	14.330	[illegible]
21	8.6139	272.09	1017.17	1052.93	737.550	646.402	34.495	21.657	.8441	75.02	-4.27	-27.461	.0981

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	49.038	.271	0.0000	0.0	.3783	1151.73	37.572	684.470	2.557	.320	.9585	.9636
2	47.924	-37.176	47.851	-.063	0.0000	0.0	.3930	1166.21	37.529	684.480	2.554	.320	.9571	[illegible]
3	47.073	-34.193	45.774	-.295	0.0000	0.0	1.0064	1179.42	37.487	684.488	2.551	.320	[illegible]	[illegible]
4	46.461	-31.087	45.330	-.571	0.0000	0.0	1.0171	1183.82	37.447	684.493	2.548	.320	.9547	[illegible]
5	45.996	-27.918	45.230	-.793	0.0000	0.0	1.0247	1197.14	37.403	684.494	2.546	.320	[illegible]	[illegible]
6	45.645	-24.736	44.554	-.971	0.0000	0.0	1.0295	1201.78	37.372	684.493	2.543	.320	[illegible]	[illegible]
7	45.326	-21.535	44.263	-1.061	0.0000	0.0	1.0316	1203.86	37.315	684.488	2.539	.320	[illegible]	[illegible]
8	45.060	-15.525	43.965	-1.094	0.0000	0.0	1.0317	1203.91	37.243	684.478	2.534	.320	[illegible]	[illegible]
9	44.848	-15.408	43.735	-1.106	0.0000	0.0	1.0303	1202.62	37.171	684.466	2.529	.320	[illegible]	[illegible]
10	44.674	-12.073	43.623	-.851	0.0000	0.0	1.0264	1199.42	37.031	685.145	2.518	.321	[illegible]	[illegible]
11	44.578	-8.394	44.331	-.239	0.0000	0.0	1.0195	1194.14	36.795	686.795	2.505	.324	[illegible]	[illegible]
12	44.556	-4.562	44.336	.330	0.0000	0.0	1.0118	1188.07	36.556	688.465	2.487	.327	[illegible]	[illegible]
13	44.668	-.900	45.580	.912	0.0000	0.0	1.0040	1182.23	36.341	690.563	2.473	.331	[illegible]	[illegible]
14	44.919	2.434	46.406	1.487	0.0000	0.0	.9960	1176.45	36.143	693.835	2.459	.336	[illegible]	[illegible]
15	45.240	[illegible]	47.299	2.051	0.0000	0.0	.9872	1169.88	35.942	695.554	2.446	.341	[illegible]	[illegible]
16	45.577	10.327	49.235	3.707	0.0000	0.0	.9765	1163.91	35.707	701.157	2.430	.352	[illegible]	[illegible]
17	45.337	16.516	52.412	6.515	0.0000	0.0	.9623	1156.86	35.434	709.375	2.411	.364	[illegible]	[illegible]
18	46.428	24.119	56.036	9.629	0.0000	0.0	.9453	1145.51	35.161	717.594	2.391	.383	[illegible]	[illegible]
19	47.443	32.127	59.050	11.607	0.0000	0.0	.9248	1126.19	34.994	722.831	2.381	.393	[illegible]	[illegible]
20	48.844	33.701	63.744	14.908	0.0000	0.0	.8948	1101.14	34.796	728.560	2.369	.405	[illegible]	[illegible]
21	50.814	45.652	75.024	24.210	0.0000	0.0	.8441	1052.93	34.495	737.550	2.347	.422	.6507	.6692

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.470 ISEN. EFF.= .857 POLY. EFF.= .874 DELTA T ON T = .343

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	1052.12	573.25	1251.73	584.470	555.147	35.551	17.507	1.0820	32.81	5.21	-3.688	.0848
2	7.7543	1036.29	591.10	1229.20	684.480	559.794	35.513	18.007	1.0561	32.54	4.64	-3.440	.0865
3	7.7934	1020.21	642.51	1205.83	684.488	564.511	36.471	18.322	1.0337	32.21	4.09	-3.249	.0882
4	7.8323	1003.96	624.43	1182.31	584.493	569.163	35.418	19.035	1.0094	31.88	3.57	-3.116	.0899
5	7.8711	987.44	607.35	1159.27	684.494	573.626	36.353	19.528	.9859	31.59	3.11	-3.040	.0915
6	7.9033	970.40	592.19	1136.56	684.493	577.935	35.243	19.391	.9630	31.40	2.73	-3.006	.0930
7	7.9437	952.70	573.53	1114.70	584.438	581.983	35.122	20.415	.9413	31.28	2.44	-3.002	.0943
8	7.9874	933.05	565.39	1094.07	584.478	585.758	33.392	20.804	.9208	31.18	2.26	-3.017	.0955
9	8.0275	920.67	554.71	1074.35	584.466	589.198	35.850	21.159	.9021	31.07	2.19	-3.048	.0965
10	8.0633	905.09	543.75	1050.72	635.145	593.065	35.635	21.482	.8840	30.97	2.21	-3.094	.0974
11	8.1030	890.95	533.34	1038.35	586.795	597.898	35.470	21.779	.8651	30.91	2.30	-3.164	.0979
12	8.1510	875.94	524.37	1020.30	638.465	602.549	35.245	22.047	.8473	30.91	2.45	-3.264	.0984
13	8.1937	863.40	513.24	1007.02	630.563	606.982	35.104	22.231	.8329	30.98	2.53	-3.392	.0987
14	8.2372	851.91	511.92	994.92	673.035	611.466	34.983	22.511	.8198	31.10	2.83	-3.553	.0990
15	8.2814	841.10	510.70	984.00	695.554	615.779	34.892	22.701	.8080	31.27	3.02	-3.750	.0991
16	8.3253	832.51	517.33	976.59	701.157	622.606	34.735	22.856	.7975	31.51	3.16	-4.064	.0987
17	8.3721	825.18	514.33	972.21	709.375	631.565	34.593	22.953	.7883	31.92	3.15	-4.652	.0978
18	8.4131	818.48	522.57	971.07	717.594	640.084	34.425	22.996	.7823	32.56	2.65	-6.054	.0966
19	8.4675	813.12	535.95	975.54	722.631	644.348	34.325	22.907	.7833	33.33	2.15	-10.663	.0956
20	8.5131	817.54	552.74	930.97	728.560	648.472	34.130	22.365	.7899	34.06	.85	174.648	.0948
21	8.5730	825.18	583.31	1001.35	737.550	655.034	33.911	22.308	.7980	34.56	-2.03	5.947	.0916

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.547	32.408	.849	.0533	0.0	1.0820	1251.79	36.551	684.470	2.487	.320	.9266	.9353
2	31.577	-23.339	32.336	.859	.0579	0.0	1.0581	1229.20	36.513	684.480	2.485	.320	.9253	.9342
3	31.343	-21.350	32.214	.871	.0570	0.0	1.0337	1205.83	36.471	684.488	2.482	.320	.9240	.9330
4	30.933	-17.056	31.980	.893	.0573	0.0	1.0094	1182.31	36.418	684.493	2.478	.320	.9222	.9314
5	30.588	-15.716	31.590	.907	.0590	0.0	.9859	1159.27	36.353	684.494	2.474	.320	.9202	.9296
6	30.473	-14.495	31.431	.925	.0613	0.0	.9630	1133.56	36.249	684.493	2.467	.320	.9169	.9267
7	30.331	-12.321	31.231	.950	.0651	0.0	.9413	1114.70	35.122	684.488	2.458	.320	.9129	.9231
8	30.207	-11.319	31.173	.971	.0690	0.0	.9205	1094.07	35.392	684.478	2.446	.320	.9085	.9192
9	30.079	-5.223	31.069	.991	.0725	0.0	.9021	1074[illegible]	35.850	684.466	2.439	.320	.9043	.9154
10	29.950	-5.032	30.365	1.009	.0740	0.0	.8840	105[illegible]	35.635	635.145	2.429	.321	.8957	.9077
11	29.992	-3.945	30.336	1.024	.0745	0.0	.8651	1038.[illegible]	35.470	586.795	2.414	.324	.8797	.8935
12	29.870	-1.853	30.305	1.035	.0749	0.0	.8473	1020.[illegible]	35.245	638.465	2.398	.327	.8639	.8794
13	29.932	.218	30.370	1.045	.0718	0.0	.8328	1007.02	35.104	630.563	2.389	.331	.8489	.8661
14	30.052	2.499	31.101	1.044	.0683	0.0	.8198	994.92	34.983	673.035	2.380	.336	.8331	.8513
15	30.219	3.077	31.255	1.046	.0648	0.0	.8080	984.00	34.892	695.554	2.372	.341	.8174	.8380
16	30.468	3.144	31.508	1.041	.0595	0.0	.7975	976.59	34.735	701.157	2.364	.352	.7885	.8121
17	30.367	11.504	31.322	1.035	.0535	0.0	.7883	972.21	34.593	709.375	2.353	.358	.7508	.7778
18	31.525	15.695	32.357	1.032	.0479	0.0	.7823	971.07	34.425	717.594	2.343	.393	.7145	.7469
19	32.293	17.938	33.325	1.033	.0451	0.0	.7833	975.54	34.325	722.631	2.336	.393	.6941	.7277
20	33.020	24.133	34.063	1.042	.0437	0.0	.7899	985.87	34.180	728.560	2.326	.405	.6786	.7066
21	33.475	23.725	34.557	1.079	.0455	0.0	.7980	1001.96	33.911	737.550	2.307	.422	.6361	.6754

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.405 ISEN. EFF.= .826 POLY. EFF.= .846 DELTA T ON T = .343

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	922.73	292.44	967.96	684.470	607.234	35.567	23.337	.8003	17.58	-2.23	-5.196	.1033
2	7.7561	907.25	286.39	951.53	684.480	609.850	35.510	23.653	.7850	17.55	-2.45	-5.828	.1043
3	7.7893	892.32	282.01	935.82	684.488	612.306	35.448	23.946	.7705	17.54	-2.64	-6.683	.1051
4	7.8244	877.90	277.52	920.83	684.493	614.609	35.377	24.214	.7568	17.55	-2.79	-7.747	.1059
5	7.8537	864.39	273.47	906.62	684.494	616.754	35.293	24.455	.7438	17.56	-2.88	-9.217	.1066
6	7.8950	849.85	268.54	891.27	684.493	619.031	35.135	24.564	.7299	17.54	-2.92	-11.237	.1071
7	7.9334	835.30	263.25	876.33	684.488	621.205	34.951	24.[illegible]	.7164	17.48	-2.87	-14.081	.1075
8	7.9720	822.79	258.00	862.31	684.478	623.208	34.749	24.[illegible]	.7039	17.41	-2.75	-18.257	.1078
9	8.0120	811.33	253.92	850.13	684.466	624.916	34.553	25.[illegible]	.6930	17.38	-2.54	-24.694	.1079
10	8.0532	801.92	251.17	840.34	685.145	626.963	34.388	25.[illegible]	.6839	17.39	-2.28	-35.387	.1079
11	8.0933	792.19	248.69	830.31	686.795	630.001	34.167	25.[illegible]	.6741	17.43	-1.96	-54.271	.1076
12	8.1337	783.19	246.34	821.01	688.465	632.942	33.945	25.[illegible]	.6650	17.46	-1.59	-92.874	.1072
13	8.1849	780.42	245.65	818.17	690.563	635.431	33.864	25.[illegible]	.6614	17.47	-1.20	-182.846	.1069
14	8.2311	773.09	245.43	816.84	693.035	638.090	33.800	25.265	.6590	17.49	-.81	-387.976	.1065
15	8.2731	778.31	245.74	816.18	695.554	640.707	33.733	25.259	.6571	17.52	-.43	-609.945	.1060
16	8.3261	780.50	247.54	818.92	701.157	645.972	33.702	25.244	.6566	17.60	-.06	-443.610	.1053
17	8.3749	783.61	250.73	822.94	709.375	653.559	33.652	25.220	.6561	17.74	.28	-253.024	.1037
18	8.4247	787.26	255.43	827.68	717.594	661.262	33.601	25.182	.6561	17.98	.57	-179.884	.1024
19	8.4752	790.07	261.57	832.24	722.631	665.692	33.565	25.125	.6576	18.32	.80	-199.741	.1018
20	8.5267	793.30	269.05	837.68	728.560	670.894	33.493	25.038	.6593	18.73	.93	-56596.785	.1003
21	8.5795	790.49	277.93	843.55	737.550	679.106	33.344	24.910	.6600	19.23	.88	76.314	.0986

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BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.414	17.585	1.351	.1165	0.0	.8003	967.96	35.567	684.470	2.420	.320	.8952	.9073
2	16.169	-8.935	17.548	1.359	.1151	0.0	.7850	951.53	35.510	684.480	2.416	.320	.8933	.9056
3	16.167	-8.333	17.539	1.371	.1144	0.0	.7705	935.82	35.448	684.488	2.412	.320	.8913	.9038
4	16.156	-7.731	17.547	1.391	.1147	0.0	.7568	920.83	35.377	684.493	2.407	.320	.8889	.9017
5	16.138	-7.035	17.550	1.418	.1162	0.0	.7438	906.62	35.293	684.494	2.402	.320	.8862	.8992
6	16.085	-6.231	17.536	1.451	.1222	0.0	.7299	891.27	35.135	684.493	2.391	.320	.8812	.8947
7	15.994	-5.404	17.492	1.487	.1291	0.0	.7164	875.33	34.951	684.488	2.379	.320	.8751	.8893
8	15.889	-4.456	17.414	1.525	.1364	0.0	.7039	862.31	34.749	684.478	2.365	.320	.8686	.8834
9	15.818	-3.490	17.379	1.561	.1434	0.0	.6930	850.13	34.559	684.466	2.352	.320	.8624	.8778
10	15.797	-2.553	17.391	1.594	.1464	0.0	.6839	840.34	34.388	685.145	2.340	.321	.8533	.8696
11	15.805	-1.639	17.429	1.624	.1477	0.0	.6741	830.31	34.157	686.795	2.325	.324	.8377	.8556
12	15.811	-.951	17.460	1.649	.1492	0.0	.6650	821.01	33.945	688.465	2.310	.327	.8222	.8417
13	15.807	-.334	17.474	1.667	.1439	0.0	.6614	818.17	33.864	690.563	2.304	.331	.8095	.8303
14	15.813	.273	17.499	1.676	.1382	0.0	.6590	815.84	33.800	693.035	2.300	.336	.7959	.8181
15	15.848	1.006	17.523	1.675	.1323	0.0	.6571	816.18	33.739	695.554	2.296	.341	.7826	.8062
16	15.930	1.911	17.596	1.665	.1229	0.0	.6566	819.82	33.702	701.157	2.293	.352	.7574	.7836
17	16.034	2.951	17.739	1.655	.1122	0.0	.6561	822.94	33.652	709.375	2.290	.368	.7232	.7530
18	16.333	4.101	17.980	1.645	.1015	0.0	.6561	827.68	33.601	717.594	2.286	.383	.6917	.7248
19	16.675	5.330	18.318	1.643	.0962	0.0	.6576	832.24	33.566	722.631	2.284	.393	.6735	.7085
20	17.073	6.859	18.734	1.655	.0921	0.0	.6593	837.60	33.499	728.560	2.279	.405	.6526	.6897
21	17.510	8.542	19.229	1.719	.0896	0.0	.6600	843.56	33.344	737.550	2.269	.422	.6217	.6618

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.333 ISEN. EFF.= .794 POLY. EFF.= .817 DELTA T ON T = .343

STATION 14 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	[illegible]	[illegible]	772.71	634.470	635.286	[illegible]	26.592	.6248	6.18	-4.29	16.241	.1125
2	7.7031	[illegible]	[illegible]	770.01	[illegible]	635.640	34.487	26.572	.6224	6.07	-4.15	16.619	.1124
3	[illegible]	[illegible]	[illegible]	767.23	[illegible]	[illegible]	34.391	26.549	.6203	5.96	[illegible]	17.019	.1122
4	7.7327	[illegible]	[illegible]	[illegible]	[illegible]	636.377	[illegible]	25.524	.6174	5.87	-3.80	17.435	.1121
5	7.8213	[illegible]	[illegible]	[illegible]	[illegible]	636.776	[illegible]	26.497	.6147	5.80	-3.59	17.861	.1119
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	637.704	[illegible]	[illegible]	.6082	5.73	-3.36	18.330	.1116
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.438	.6007	5.67	-3.09	18.913	.1113
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.407	.5924	5.62	-2.78	[illegible]	.1109
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	641.033	[illegible]	25.377	.5845	5.55	-2.43	20.649	.1106
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.051	26.348	[illegible]	5.55	-2.05	21.846	.1103
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.322	.5723	5.52	[illegible]	23.376	.1097
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.299	[illegible]	5.50	-1.23	25.463	.1092
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.280	[illegible]	5.50	[illegible]	28.265	.1088
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.257	.5601	5.49	-.44	31.927	.1084
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.258	[illegible]	5.49	-.10	35.816	.1080
16	[illegible]	[illegible]	[illegible]	[illegible]	711.157	[illegible]	[illegible]	26.254	[illegible]	[illegible]	.21	43.730	.1071
17	[illegible]	[illegible]	71.11	[illegible]	[illegible]	[illegible]	[illegible]	25.255	.5719	[illegible]	.48	54.306	.1059
18	[illegible]	[illegible]	71.73	[illegible]	[illegible]	573.753	[illegible]	26.260	[illegible]	5.64	.69	73.017	.1048
19	[illegible]	[illegible]	[illegible]	[illegible]	722.031	[illegible]	[illegible]	25.269	[illegible]	5.77	.86	[illegible]	.1041
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.292	.5733	5.98	.99	273.574	.1033
21	[illegible]	732.30	[illegible]	[illegible]	737.590	[illegible]	[illegible]	[illegible]	[illegible]	6.33	1.06	-610.607	.1020

BLADE DATA

LOCATION	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	772.71	34.579	634.470	2.353	.320	.8631	.8784
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	770.01	[illegible]	634.480	2.347	.320	.8600	.8756
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	2.340	.320	.8568	.8727
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.333	.320	.8533	.8696
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.326	.320	.8497	.8663
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.311	.320	.8427	.8599
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.8347	.8526
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.277	.320	.8261	.8449
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.261	.320	.8181	.8375
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.249	.321	.8087	.8290
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.235	.324	.7939	.8156
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.221	.327	.7791	.8022
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5653	[illegible]	[illegible]	[illegible]	2.220	.331	.7692	.7933
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	32.533	[illegible]	2.221	[illegible]	.7584	.7836
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	711.21	[illegible]	[illegible]	2.221	.341	.7478	.7741
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5696	[illegible]	[illegible]	731.157	[illegible]	.352	.7266	.7551
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5715	[illegible]	[illegible]	709.375	[illegible]	.358	.6967	.7284
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5736	[illegible]	32.404	[illegible]	2.232	.393	[illegible]	.7037
19	[illegible]	[illegible]	[illegible]	[illegible]	.1402	[illegible]	.5740	[illegible]	[illegible]	[illegible]	2.234	[illegible]	[illegible]	.6893
20	[illegible]	[illegible]	[illegible]	[illegible]	.1401	[illegible]	.5733	[illegible]	[illegible]	[illegible]	2.233	[illegible]	.6346	.6726
21	[illegible]	[illegible]	[illegible]	[illegible]	.1335	[illegible]	.5708	[illegible]	32.779	737.350	2.230	.422	.6872	.6479

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.263 ISEN. EFF. = .761 POLY. EFF. = .785 DELTA T ON T = .343

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	787.46	0.00	787.46	634.470	633.358	33.533	25.563	.6375	0.00	-1.66	10.624	.1085
2	7.6777	784.84	0.00	784.84	634.480	633.737	33.454	25.513	.6353	0.00	-1.63	10.983	.1082
3	7.7165	782.00	0.00	782.00	634.488	634.113	33.332	25.466	.6329	0.00	-1.59	11.431	.1080
4	7.7561	778.90	0.00	778.90	634.493	634.517	33.196	25.417	.6301	0.00	-1.53	11.994	.1077
5	7.7963	775.50	0.00	775.50	634.494	634.954	33.057	25.371	.6272	0.00	-1.46	12.789	.1074
6	7.8337	765.22	0.00	765.22	634.493	636.133	32.785	25.328	.6191	0.00	-1.37	13.659	.1070
7	7.8817	755.33	0.00	755.33	634.498	637.495	32.487	25.288	.6097	0.00	-1.27	14.999	.1066
8	7.9257	743.38	0.00	743.38	634.478	638.962	32.178	25.252	.5993	0.00	-1.14	16.967	.1062
9	7.9731	731.91	0.00	731.91	634.466	640.345	31.892	25.220	.5895	0.00	-.98	20.021	.1059
10	8.0209	723.26	0.00	723.26	635.145	641.824	31.713	25.194	.5834	0.00	-.81	25.024	.1055
11	8.0701	718.38	0.00	718.38	636.795	644.297	31.526	25.174	.5768	0.00	-.62	33.951	.1050
12	8.1236	710.66	0.00	710.66	638.465	646.878	31.338	25.160	.5695	0.00	-.43	53.672	.1046
13	8.1722	715.20	0.00	715.20	690.563	648.450	31.396	25.152	.5724	0.00	-.24	122.843	.1043
14	8.2242	719.80	0.00	719.80	693.035	650.384	31.461	25.150	.5753	0.00	-.07	-720.849	.1040
15	8.2767	724.10	0.00	724.10	695.554	652.398	31.526	25.154	.5778	0.00	.09	-100.840	.1037
16	8.3236	733.57	0.00	733.57	701.157	656.878	31.670	25.162	.5834	0.00	.23	-58.355	.1030
17	8.3828	744.45	0.00	744.45	709.375	663.794	31.821	25.175	.5890	0.00	.35	-44.013	.1020
18	8.4363	755.12	0.00	755.12	717.594	670.719	31.974	25.191	.5944	0.00	.43	-37.611	.1010
19	8.4903	760.57	0.00	760.57	722.631	675.091	32.056	25.210	.5968	0.00	.49	-34.474	.1004
20	8.5449	766.17	0.00	766.17	728.560	680.334	32.133	25.230	.5989	0.00	.52	-33.212	.0997
21	8.6000	773.37	0.00	773.37	737.550	688.441	32.211	25.250	.6010	0.00	.52	-33.905	.0986

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.2312	0.0	.6376	787.46	33.533	634.470	2.286	.320	.8303	.8487
2	-7.384	.020	0.000	7.384	.2318	0.0	.6353	784.84	33.454	634.480	2.277	.320	.8260	.8447
3	-7.546	.019	0.000	7.546	.2331	0.0	.6329	782.00	33.332	634.488	2.268	.320	.8215	.8406
4	-7.709	.018	0.000	7.709	.2355	0.0	.6301	778.90	33.196	634.493	2.259	.320	.8160	.8364
5	-7.872	.016	0.000	7.872	.2391	0.0	.6272	775.50	33.057	634.494	2.249	.320	.8121	.8330
6	-8.036	.014	0.000	8.036	.2507	0.0	.6191	765.22	32.785	634.493	2.231	.320	.8029	.8236
7	-8.199	.012	0.000	8.199	.2636	0.0	.6097	755.33	32.487	634.498	2.211	.320	.7927	.8142
8	-8.360	.010	0.000	8.360	.2773	0.0	.5993	743.38	32.178	634.478	2.190	.320	.7821	.8045
9	-8.516	.008	0.000	8.516	.2897	0.0	.5895	731.91	31.892	634.466	2.170	.320	.7722	.7954
10	-8.660	.007	0.000	8.660	.2945	0.0	.5834	723.26	31.713	635.145	2.158	.321	.7620	.7867
11	-8.788	.005	0.000	8.788	.2961	0.0	.5768	718.38	31.526	636.795	2.145	.324	.7489	.7748
12	-8.898	.003	0.000	8.898	.2982	0.0	.5695	710.66	31.338	638.465	2.132	.327	.7358	.7613
13	-8.984	.001	0.000	8.984	.2870	0.0	.5724	715.20	31.396	690.563	2.136	.331	.7280	.7550
14	-9.041	-.001	0.000	9.041	.2762	0.0	.5753	719.80	31.461	693.035	2.141	.336	.7197	.7477
15	-9.062	-.004	0.000	9.062	.2651	0.0	.5778	724.10	31.526	695.554	2.145	.341	.7118	.7404
16	-9.059	-.008	0.000	9.059	.2474	0.0	.5834	733.57	31.670	701.157	2.155	.352	.6962	.7269
17	-9.060	-.012	0.000	9.060	.2274	0.0	.5890	744.45	31.821	709.375	2.165	.368	.6688	.7021
18	-9.085	-.018	0.000	9.085	.2073	0.0	.5944	755.12	31.974	717.594	2.176	.383	.6494	.6813
19	-9.125	-.024	0.000	9.125	.1979	0.0	.5968	760.57	32.056	722.631	2.181	.393	.6317	.6690
20	-9.169	-.031	0.000	9.169	.1869	0.0	.5989	766.17	32.133	728.560	2.187	.405	.6159	.6549
21	-9.213	-.038	0.000	9.213	.1779	0.0	.6010	773.37	32.211	737.550	2.192	.422	.5925	.6339

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.197 ISEN. EFF.= .726 POLY. EFF.= .754 DELTA T ON T = .343

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	803.47	0.00	803.47	684.470	631.286	33.593	25.266	.6517	0.00	0.00	0.000	.1076
2	7.6773	798.27	0.00	798.27	684.460	631.984	33.464	25.266	.6471	0.00	-.02	1600.687	.1075
3	7.7133	792.37	0.00	792.37	684.468	632.701	33.332	25.266	.6424	0.00	-.04	854.896	.1074
4	7.7549	787.27	0.00	787.27	684.493	633.435	33.19[illegible]	25.265	.6375	0.00	-.05	613.408	.1072
5	7.7933	781.46	0.00	781.46	684.494	634.188	33.057	25.264	.6324	0.00	-.07	499.490	.1071
6	7.8339	769.91	0.00	769.91	684.493	635.666	32.785	25.263	.6223	0.00	-.08	437.581	.1068
7	7.8809	756.96	0.00	756.96	684.488	637.304	32.487	25.261	.6110	0.00	-.08	403.550	.1066
8	7.9247	742.92	0.00	742.92	684.479	639.019	32.179	25.260	.5989	0.00	-.09	388.523	.1063
9	7.9711	729.55	0.00	729.55	684.465	640.618	31.892	25.258	.5875	0.00	-.09	389.445	.1060
10	8.0130	721.49	0.00	721.49	685.145	642.274	31.713	25.257	.5802	0.00	-.08	406.366	.1057
11	8.0633	713.40	0.00	713.40	686.735	644.885	31.523	25.255	.5725	0.00	-.08	442.142	.1053
12	8.1131	704.82	0.00	704.82	688.405	647.562	31.333	25.254	.5645	0.00	-.07	504.653	.1048
13	8.1703	708.34	0.00	708.34	690.563	649.195	31.395	25.253	.5671	0.00	-.06	606.052	.1046
14	8.2231	713.48	0.00	713.48	693.035	651.130	31.461	25.252	.5693	0.00	-.05	767.120	.1043
15	8.2739	718.06	0.00	718.05	695.554	653.116	31.525	25.251	.5727	0.00	-.03	1037.008	.1039
16	8.3230	724.12	0.00	724.12	701.157	657.534	31.670	25.251	.5785	0.00	-.02	1526.014	.1032
17	8.3424	733.83	0.00	733.83	709.375	664.359	31.821	25.251	.5851	0.00	-.01	2523.253	.1022
18	8.4352	751.51	0.00	751.51	717.594	671.167	31.974	25.250	.5914	0.00	-.01	5106.462	.1011
19	8.4913	758.10	0.00	758.10	722.631	675.399	32.055	25.250	.5947	0.00	-.00	16279.042	.1005
20	8.5443	764.92	0.00	764.92	725.560	680.491	32.133	25.250	.5979	0.00	-.00	-220681.278	.0998
21	8.6030	773.37	0.00	773.37	737.590	688.441	32.211	25.250	.6013	0.00	0.00	0.000	.0986

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	804.32	0.00	804.32	[illegible].470	631.173	33.593	25.250	.6524	0.00	0.00	0.000	.1076
2	7.6772	799.11	0.00	799.11	[illegible].460	631.873	33.464	25.250	.6478	0.00	-.00	0.000	.1074
3	7.71[illegible]	793.70	0.00	793.70	684.458	632.592	33.332	25.250	.6431	0.00	-.00	0.000	.1073
4	7.7549	788.07	0.00	788.07	684.433	633.332	33.195	25.250	.6382	0.00	-.00	0.000	.1072
5	7.7952	782.21	0.00	782.21	684.434	634.093	33.057	25.250	.6330	0.00	-.00	0.000	.1071
6	7.8355	770.33	0.00	770.99	684.493	635.979	32.735	25.250	.6223	0.00	-.00	0.000	.1068
7	7.8809	757.48	0.00	757.48	684.483	637.227	32.447	25.250	.6115	0.00	-.00	0.000	.1065
8	7.9246	743.46	0.00	743.46	684.476	638.952	32.173	25.250	.5994	0.00	-.00	0.000	.1062
9	7.9710	730.12	0.00	730.12	684.466	640.561	31.892	25.250	.5879	0.00	-.00	0.000	.1060
10	8.0139	721.58	0.00	721.58	685.145	642.228	31.713	25.250	.5805	0.00	-.00	0.000	.1057
11	8.0632	713.71	0.00	713.71	686.735	644.849	31.523	25.250	.5729	0.00	-.00	0.000	.1053
12	8.1130	705.05	0.00	705.05	688.405	647.534	31.339	25.250	.5647	0.00	-.00	0.000	.1048
13	8.1703	709.11	0.00	709.11	690.563	649.166	31.395	25.250	.5673	0.00	-.00	0.000	.1046
14	8.2231	713.50	0.00	713.50	693.035	651.117	31.461	25.250	.5700	0.00	-.00	0.000	.1043
15	8.2753	718.13	0.00	718.13	695.554	653.108	31.525	25.250	.5725	0.00	-.00	0.000	.1039
16	8.3230	728.16	0.00	728.16	701.157	657.530	31.670	25.250	.5786	0.00	-.00	0.000	.1032
17	8.3824	739.34	0.00	739.34	709.375	664.356	31.821	25.250	.5851	0.00	-.00	0.000	.1022
18	8.4351	751.52	0.00	751.52	717.594	671.166	31.974	25.250	.5914	0.00	-.00	0.000	.1011
19	8.4912	758.11	0.00	758.11	722.631	675.399	32.055	25.250	.5947	0.00	-.00	0.000	.1005
20	8.5443	764.92	0.00	764.92	725.560	680.491	32.133	25.250	.5979	0.00	-.00	0.000	.0998
21	8.6030	773.37	0.00	773.37	737.590	688.441	32.211	25.250	.6010	0.00	0.00	0.000	.0986

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	R.L.V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5493	.9950	8.524	6.132	.0321	.4116	.4222	.5421	.7526	.7639	-60.937	-12.647	6.879	10.791
2	6.9013	7.5375	1.0014	8.332	6.379	.0353	.4314	.4409	.5441	.7337	.7613	-61.333	-13.386	6.231	10.682
3	6.9719	7.5201	1.0107	8.172	6.531	.0353	.4478	.4552	.5421	.7180	.7537	-61.709	-14.134	6.366	10.278
4	7.0818	7.5096	1.0313	7.930	6.637	.0352	.4614	.4587	.5373	.7050	.7459	-62.052	-14.873	6.420	9.698
5	7.1911	7.7001	1.0471	7.527	6.779	.0849	.4725	.4784	.5331	.6943	.7381	-62.357	-15.625	6.325	8.956
6	7.2399	7.7474	1.0623	7.704	6.755	.0845	.4417	.4371	.5213	.6855	.7303	-62.636	-16.392	6.047	8.171
7	7.4093	7.7335	1.0759	7.601	6.907	.0352	.4895	.4940	.5111	.5773	.7224	-62.904	-17.145	5.592	7.822
8	7.5154	7.8325	1.0915	7.512	6.330	.0866	.4962	.4199	.4933	.5712	.7144	-63.173	-17.855	4.935	7.860
9	7.6243	7.8743	1.1039	7.439	6.994	.0979	.5015	.5144	.4575	.6659	.7064	-63.447	-18.503	4.105	6.730
10	7.7322	7.9211	1.1201	7.379	7.074	.0933	.5116	.5137	.4747	.6554	.7013	-63.731	-19.093	3.109	6.650
11	7.8405	7.9673	1.1340	7.333	7.173	.1224	.5290	.5303	.4614	.5404	.7001	-64.031	-19.631	1.985	6.821
12	7.9492	8.0154	1.1471	7.301	7.343	.1449	.5452	.5459	.4479	.5252	.6987	-64.349	-20.129	.770	7.252
13	8.0589	8.0654	1.1511	7.230	7.417	.1683	.5622	.5123	.4341	.5034	.6986	-64.588	-20.554	-.552	7.922
14	8.1595	8.1175	1.1747	7.258	7.539	.1924	.5900	.5794	.4213	.5930	.6936	-65.054	-21.001	-2.014	8.844
15	8.2315	8.1720	1.1573	7.233	7.327	.2155	.5971	.5960	.4057	.5709	.7003	-65.451	-21.380	-3.600	9.933
16	8.3354	8.2233	1.2311	7.202	8.015	.2633	.6339	.6321	.3914	.5437	.7125	-65.979	-21.703	-5.137	11.188
17	8.5113	8.2937	1.2143	7.205	8.355	.3199	.6994	.6171	.3512	.4935	.7333	-66.335	-21.975	-6.317	12.295
18	8.6235	8.3605	1.2277	7.273	9.510	[illegible]	.7474	.7443	.3709	.4333	.7516	-66.811	-22.151	-7.035	13.306
19	8.7534	8.4493	1.2414	7.270	11.034	[illegible]	.7798	.7707	.3613	.4031	.7558	-67.298	-22.153	-7.680	13.800
20	8.8739	8.5404	1.2555	7.254	15.437	.4332	.8211	.8177	.3503	.3674	.7606	-67.799	-21.871	-8.541	13.804
21	9.0000	8.5539	1.2705	7.153	25.555	.4426	.8974	.3340	.3525	.2925	.7709	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	R.L.V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5199	7.5400	.9793	.271	7.239	.2112	.4735	.4733	.3022	.5837	0.0000	48.817	-7.239	-39.941	.020
2	7.5593	7.5777	.9933	-.053	7.339	.2313	.4803	.4383	.3147	.5730	0.0000	47.924	-7.388	-37.176	.020
3	7.7181	7.7155	1.0354	-.238	7.546	.2331	.5024	.5324	.3235	.5630	0.0000	47.073	-7.546	-34.193	.019
4	7.7044	7.7501	1.0171	-.371	7.709	.2355	.5147	.5143	.3335	.5545	0.0000	46.461	-7.709	-31.087	.018
5	7.8057	7.7905	1.0247	-.793	7.872	.2391	.5251	.5253	.3373	.5475	0.0000	45.994	-7.872	-27.918	.016
6	7.8515	7.8357	1.0295	-.971	8.035	.2537	.5388	.5309	.3417	.5375	0.0000	45.635	-8.036	-24.738	.014
7	7.8941	7.8819	1.0315	-1.001	8.199	.2636	.5522	.5324	.3434	.5274	0.0000	45.324	-8.199	-21.598	.012
8	7.9350	7.9257	1.0317	-1.034	8.350	.2770	.5653	.5354	.3442	.5175	0.0000	45.060	-8.360	-18.525	.010
9	7.9771	7.9731	1.0303	-1.105	8.515	.2837	.5769	.5769	.3440	.5056	0.0000	44.840	-8.516	-15.488	.008
10	8.0182	8.0239	1.0284	-.831	8.650	.2945	.5841	.5441	.3445	.5047	0.0000	44.674	-8.660	-12.073	.007
11	8.0597	8.1701	1.0195	-.233	8.788	.2951	.5913	.5412	.3459	.5015	0.0000	44.570	-8.788	-8.394	.005
12	8.1017	8.1205	1.0113	.330	8.393	.2932	.5984	.5481	.3439	.5952	0.0000	44.556	-8.898	-4.562	.003
13	8.1444	8.1722	1.0049	.912	8.934	.2870	.5950	.5447	.3505	.6053	0.0000	44.666	-8.984	-.980	.001
14	8.1875	8.2242	.9933	1.437	9.041	.2752	.5912	.5307	.3515	.6118	0.0000	44.919	-9.041	2.404	-.001
15	8.2321	8.2737	.9972	2.021	9.062	.2651	.5865	.5360	.3525	.6190	0.0000	45.248	-9.062	5.865	-.004
16	8.2779	8.3235	.9755	3.707	9.053	.2474	.5802	.5796	.3537	.6303	0.0000	45.577	-9.059	10.327	-.008
17	8.3205	8.3825	.9929	5.513	9.030	.2274	.5740	.5732	.3543	.6435	0.0000	45.997	-9.060	16.516	-.012
18	8.3806	8.4363	.9453	8.029	9.055	.2073	.5642	.5535	.3515	.5592	0.0000	46.428	-9.085	24.114	-.018
19	8.4406	8.4903	.9243	11.637	9.125	.1379	.5503	.5496	.3403	.5742	0.0000	47.443	-9.125	32.127	-.024
20	8.5118	8.5443	.9345	14.900	9.139	.1833	.5288	.5284	.3212	.5959	0.0000	48.844	-9.163	39.761	-.031
21	8.5199	8.5000	.9441	24.210	9.213	.1779	.4895	.4196	.2713	.7345	0.0000	50.914	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	20.5	21.4	21.4
DIST FACTOR	1.3	1.0	1.3	1.0	.8	.6	.4	.2	3.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.3	0.0	0.3	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	20.5	21.4	21.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 20

TEST POINT TITLE = 301131015885

FLOW = 20.80 SPEED = 17341.4 PRESSURE RATIO = 2.187 ISENTROPIC EFFY = .7264 POLYTROPIC EFFY = .7543 DEL T/T = .3434

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	----ROTOR---- ISEN EFFY	----STAGE---- PRESSURE RATIO	----STAGE---- ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301131015885	CONVERGED AFTER 20 PASSES	20.801	17341.4	2.476	.857	2.187	.726	.54559

7. TEST POINT 301181715890 (90%)

PASS 3 STATION [illegible] STREAMLINE 21 ITERATION 1 VM/VM(MID)= 3.2[illegible]1 VM(MID)= .7715[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.[illegible] VM(MID)= .7715[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.[illegible] VM(MID)= .[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.[illegible] VM(MID)= .7715[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.[illegible] VM(MID)= .7715[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.9[illegible] VM(MID)= .7715[illegible]+03
PASS 3 STATION [illegible] STREAMLINE 21 ITERATION [illegible] VM/VM(MID)= 4.[illegible] VM(MID)= .7715[illegible]+03

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	20.93	0.000	.0734
2	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	19.71	0.000	.0734
3	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	18.47	0.000	.0734
4	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	17.22	0.000	.0734
5	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	15.96	0.000	.0734
6	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	14.71	0.000	.0734
7	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	13.45	0.000	.0734
8	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	12.21	0.000	.0734
9	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	10.98	0.000	.0734
10	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	9.76	0.000	.0734
11	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	8.56	0.000	.0734
12	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	7.42	0.000	.0734
13	7.9315	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	6.31	0.000	.0734
14	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	5.25	0.000	.0734
15	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	4.25	0.000	.0734
16	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	3.31	0.000	.0734
17	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	2.45	0.000	.0734
18	[illegible]	301.33	0.00	301.33	[illegible]	511.156	[illegible]	13.962	.2715	0.00	1.68	0.000	.0734
19	8.7931	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	1.00	0.000	.0734
20	8.9415	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	.44	0.000	.0734
21	[illegible]	301.33	0.00	301.33	[illegible]	511.155	[illegible]	13.962	.2715	0.00	0.00	0.000	.0734

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	329.[illegible]	0.00	[illegible]	[illegible]	509.721	[illegible]	13.825	.2967	0.00	20.93	-205.758	.0729
2	[illegible]	330.[illegible]	0.00	[illegible]	[illegible]	509.523	[illegible]	13.816	.2983	0.00	19.52	-114.996	.0729
3	[illegible]	332.[illegible]	0.00	332.[illegible]	[illegible]	509.337	[illegible]	13.80[illegible]	.2993	0.00	18.22	-83.597	.0729
4	[illegible]	333.72	0.00	[illegible]	[illegible]	509.462	[illegible]	13.[illegible]01	.3010	0.00	16.91	-67.388	.0728
5	[illegible]	334.[illegible]	0.00	[illegible]	[illegible]	509.359	[illegible]	13.[illegible]	.3021	0.00	15.60	-57.216	.0728
6	[illegible]	335.[illegible]	0.00	[illegible]	[illegible]	509.340	[illegible]	13.730	.3029	0.00	14.29	-43.991	.0728
7	7.1312	[illegible]	0.00	[illegible]	[illegible]	509.307	[illegible]	13.78[illegible]	.3035	0.00	12.99	-44.393	.0728
8	[illegible]	[illegible]	0.00	[illegible]	[illegible]	509.292	[illegible]	13.784	.3040	0.00	11.69	-39.785	.0728
9	[illegible]	337.15	0.00	337.15	[illegible]	509.270	[illegible]	13.743	.3042	0.00	10.41	-35.831	.0728
10	[illegible]	337.[illegible]	0.00	337.[illegible]	[illegible]	509.275	[illegible]	13.783	.3041	0.00	9.14	-32.354	.0728
11	[illegible]	336.[illegible]	0.00	[illegible]	[illegible]	509.296	[illegible]	13.785	.3038	0.00	7.89	-23.253	.0728
12	[illegible]	335.01	0.00	[illegible]	[illegible]	509.335	[illegible]	13.789	.3031	0.00	6.66	-26.468	.0728
13	[illegible]	334.39	0.00	334.39	[illegible]	509.392	[illegible]	13.794	.3022	0.00	5.47	-23.959	.0728
14	[illegible]	333.02	0.00	333.02	[illegible]	509.467	[illegible]	13.[illegible]	.3004	0.00	4.32	-21.704	.0728
15	[illegible]	331.39	0.00	331.39	[illegible]	509.562	[illegible]	13.810	.2994	0.00	3.23	-19.672	.0729
16	[illegible]	329.50	0.00	329.[illegible]	[illegible]	509.677	[illegible]	13.821	.2974	0.00	2.18	-17.835	.0729
17	[illegible]	327.35	0.00	327.35	[illegible]	509.811	[illegible]	13.834	.2952	0.00	1.21	-16.161	.0730
18	[illegible]	324.[illegible]	0.00	324.[illegible]	[illegible]	509.964	[illegible]	13.848	.2925	0.00	.31	-14.620	.0730
19	8.8071	321.25	0.00	321.25	[illegible]	510.138	[illegible]	13.865	.2895	0.00	-.52	-13.191	.0731
20	8.9477	317.29	0.00	317.29	[illegible]	510.332	[illegible]	13.883	.2862	0.00	-1.26	-11.820	.0731
21	[illegible]	313.44	0.00	313.44	[illegible]	510.549	[illegible]	13.904	.2824	0.00	-1.91	-10.518	.0732

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6015	363.06	0.00	363.06	518.688	507.768	14.696	13.641	.3280	0.00	20.54	-83.831	.0722
2	6.7240	365.50	0.00	365.50	518.688	507.620	14.696	13.627	.3303	0.00	19.15	-82.279	.0722
3	6.8455	367.80	0.00	367.80	518.688	507.481	14.696	13.614	.3324	0.00	17.77	-77.179	.0721
4	6.9561	369.92	0.00	369.92	518.688	507.351	14.696	13.602	.3344	0.00	16.38	-69.656	.0721
5	7.0851	371.81	0.00	371.81	518.688	507.235	14.696	13.591	.3361	0.00	14.99	-60.986	.0720
6	7.2055	373.43	0.00	373.43	518.688	507.135	14.696	13.581	.3376	0.00	13.60	-52.173	.0720
7	7.3245	374.73	0.00	374.73	518.688	507.054	14.696	13.574	.3389	0.00	12.19	-43.997	.0720
8	7.4432	375.66	0.00	375.66	518.688	506.996	14.696	13.568	.3397	0.00	10.78	-36.855	.0719
9	7.5618	376.16	0.00	376.16	518.688	506.965	14.696	13.565	.3401	0.00	9.37	-30.657	.0719
10	7.6805	376.17	0.00	376.17	518.688	506.965	14.696	13.565	.3402	0.00	7.95	-25.954	.0719
11	7.7994	375.64	0.00	375.64	518.688	506.998	14.696	13.568	.3397	0.00	6.54	-22.018	.0719
12	7.9187	374.52	0.00	374.52	518.688	507.067	14.696	13.575	.3386	0.00	5.14	-19.885	.0720
13	8.0387	372.79	0.00	372.79	518.688	507.174	14.696	13.585	.3370	0.00	3.76	-16.406	.0720
14	8.1597	370.42	0.00	370.42	518.688	507.320	14.696	13.599	.3348	0.00	2.40	-14.435	.0721
15	8.2817	367.42	0.00	367.42	518.688	507.504	14.696	13.616	.3321	0.00	1.09	-12.872	.0721
16	8.4051	363.80	0.00	363.80	518.688	507.723	14.696	13.637	.3287	0.00	-.17	-11.648	.0722
17	8.5301	359.60	0.00	359.60	518.688	507.975	14.696	13.660	.3247	0.00	-1.37	-10.709	.0723
18	8.6583	354.89	0.00	354.89	518.688	508.253	14.696	13.686	.3205	0.00	-2.50	-10.006	.0724
19	8.7857	349.76	0.00	349.76	518.688	508.553	14.696	13.715	.3158	0.00	-3.55	-9.491	.0725
20	8.9167	344.28	0.00	344.28	518.688	508.869	14.696	13.745	.3107	0.00	-4.54	-9.100	.0726
21	9.0500	338.46	0.00	338.46	518.688	509.198	14.696	13.776	.3054	0.00	-5.47	-8.690	.0727

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	399.89	0.00	399.89	518.688	505.439	14.696	13.423	.3622	0.00	20.32	-388.854	.0714
2	6.8615	403.41	0.00	403.41	518.688	505.205	14.696	13.401	.3654	0.00	18.95	-729.302	.0713
3	6.9721	406.74	0.00	406.74	518.688	504.982	14.696	13.380	.3685	0.00	17.57	-25166.546	.0712
4	7.0821	409.89	0.00	409.89	518.688	504.769	14.696	13.361	.3714	0.00	16.18	1388.725	.0712
5	7.1914	412.83	0.00	412.83	518.688	504.568	14.696	13.342	.3742	0.00	14.75	3400.363	.0711
6	7.3002	415.50	0.00	415.50	518.688	504.385	14.696	13.325	.3767	0.00	13.29	-549.474	.0710
7	7.4085	417.90	0.00	417.90	518.688	504.225	14.696	13.310	.3788	0.00	11.79	-168.874	.0710
8	7.5165	419.63	0.00	419.63	518.688	504.099	14.696	13.299	.3805	0.00	10.25	-83.313	.0709
9	7.6244	420.87	0.00	420.87	518.688	504.013	14.696	13.291	.3817	0.00	8.66	-43.846	.0709
10	7.7324	421.39	0.00	421.39	518.688	503.976	14.696	13.287	.3822	0.00	7.05	-33.270	.0709
11	7.8406	421.11	0.00	421.11	518.688	503.996	14.696	13.289	.3819	0.00	5.41	-24.153	.0709
12	7.9493	419.93	0.00	419.93	518.688	504.078	14.696	13.297	.3808	0.00	3.76	-18.614	.0709
13	8.0589	417.79	0.00	417.79	518.688	504.227	14.696	13.311	.3783	0.00	2.11	-14.879	.0710
14	8.1695	414.64	0.00	414.64	518.688	504.444	14.696	13.331	.3759	0.00	.47	-12.225	.0710
15	8.2816	410.42	0.00	410.42	518.688	504.732	14.696	13.357	.3719	0.00	-1.14	-10.276	.0711
16	8.3954	405.13	0.00	405.13	518.688	505.090	14.696	13.390	.3670	0.00	-2.70	-8.848	.0713
17	8.5112	398.84	0.00	398.84	518.688	505.509	14.696	13.429	.3612	0.00	-4.17	-7.878	.0714
18	8.6294	391.78	0.00	391.78	518.688	505.971	14.696	13.472	.3546	0.00	-5.51	-7.324	.0716
19	8.7503	384.28	0.00	384.28	518.688	506.454	14.696	13.518	.3477	0.00	-6.66	-7.153	.0718
20	8.8739	376.68	0.00	376.68	518.688	506.921	14.696	13.561	.3408	0.00	-7.64	-7.591	.0719
21	9.0000	370.68	0.00	370.68	518.688	507.305	14.696	13.597	.3351	0.00	-8.25	-10.317	.0721

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	[illegible]	REL FLOW ANGLE	DEVIATION	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-50.937	5.170	-69.[illegible]	[illegible]	0.0000	1083.[illegible]	1.0461	1155.07	25.933	615.410	1.000	0.000	1.0000	1.0000
2	-51.359	5.241	-69.[illegible]	[illegible]	0.0000	1101.[illegible]	1.0626	1173.95	27.330	619.[illegible]	1.000	0.000	1.0000	1.0000
3	-51.717	5.356	-70.[illegible]30	8.313	0.0000	1119.3	1.0790	1190.91	27.939	622.295	1.000	0.000	1.0000	1.0000
4	-52.[illegible]	5.420	-70.1[illegible]	8.113	0.0000	1136.[illegible]	1.0952	1208.5[illegible]	28.359	625.582	1.000	0.000	1.0000	1.0000
5	-52.355	5.329	-70.32[illegible]	7.[illegible]	0.0000	1154.[illegible]	1.1113	1226.04	28.832	628.900	1.000	0.000	1.0000	1.0000
6	-52.544	5.[illegible]	-70.[illegible]	7.935	0.0000	1172.0	1.1272	1243.43	29.437	632.251	1.000	0.000	1.0000	1.0000
7	-52.911	5.[illegible]1	-70.[illegible]	7.7[illegible]3	0.0000	1189.3	1.1430	1260.66	29.935	635.636	1.000	0.000	1.0000	1.0000
8	-53.176	4.934	-70.[illegible]	[illegible]	0.0000	1206.7	1.1585	1277.57	30.598	639.065	1.000	0.000	1.0000	1.0000
9	-53.431	4.134	-71.0[illegible]	7.574	0.0000	1224.0	1.1736	1294.35	31.130	642.536	1.000	0.000	1.0000	1.0000
10	-53.734	3.138	-71.2[illegible]	7.515	0.0000	1241.3	1.1889	1310.42	31.752	646.053	1.000	0.000	1.0000	1.0000
11	-54.032	1.934	-71.[illegible]2	7.470	0.0000	1258.7	1.2037	1327.29	32.385	649.939	1.000	0.000	1.0000	1.0000
12	-54.349	.759	-71.[illegible]	7.437	0.0000	1276.2	1.2183	1343.49	33.030	653.286	1.000	0.000	1.0000	1.0000
13	-54.689	-.593	-72.133	7.415	0.0000	1293.5	1.2327	1359.55	33.698	657.010	1.000	0.000	1.0000	1.0000
14	-55.055	-2.015	-72.[illegible]	7.401	0.0000	1311.0	1.2469	1375.51	34.392	660.823	1.000	0.000	1.0000	1.0000
15	-55.431	-3.030	-72.[illegible]	7.394	0.0000	1329.[illegible]	1.2610	1391.42	35.114	664.736	1.000	0.000	1.0000	1.0000
16	-55.873	-5.135	-73.270	7.341	0.0000	1347.9	1.2750	1407.35	35.570	668.762	1.000	0.000	1.0000	1.0000
17	-56.337	-6.316	-73.7[illegible]	7.3[illegible]2	0.0000	1366.[illegible]	1.2890	1423.40	36.601	672.910	1.000	0.000	1.0000	1.0000
18	-56.813	-7.049	-74.2[illegible]	7.[illegible]	0.0000	1385.[illegible]	1.3031	1439.69	37.434	677.217	1.000	0.000	1.0000	1.0000
19	-57.295	-7.647	-74.[illegible]1	7.[illegible]	0.0000	1404.3	1.3176	14[illegible].37	38.370	681.570	1.000	0.000	1.0000	1.0000
20	-57.795	-8.541	-75.132	7.3[illegible]	0.0000	1424.5	1.3326	1473.61	39.245	686.288	1.000	0.000	1.0000	1.0000
21	-58.315	-9.617	-7[illegible].[illegible]11	7.2[illegible]	0.0000	1444.[illegible]	1.3404	1491.64	40.233	691.066	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8973	444.48	145.32	4[illegible].[illegible]7	545.569	527.711	17.401	15.453	.4153	18.45	22.32	6.139	.0787
2	6.9337	446.31	144.13	469.[illegible]	545.515	527.250	17.35[illegible]	15.402	.4153	17.89	20.07	7.156	.0785
3	7.0335	449.33	143.74	473.15	545.250	525.994	17.311	15.359	.4177	17.39	18.97	8.745	.0784
4	7.1932	452.13	135.[illegible]	47[illegible].[illegible]	545.138	526.500	17.29[illegible]	15.325	.4195	16.98	17.23	11.608	.0782
5	7.2905	455.39	135.[illegible]	47[illegible].[illegible]	545.091	525.387	17.293	15.299	.4218	16.64	15.43	17.641	.0781
6	7.3[illegible]	459.04	134.[illegible]	479.59	54[illegible].135	[illegible]	17.29[illegible]	15.282	.4243	16.38	13.59	36.848	.0781
7	7.4[illegible]	461.75	134.03	480.33	54[illegible].3[illegible]	[illegible]	17.31[illegible]	15.275	.4258	16.19	11.70	-665.328	.0780
8	7.5675	464.31	133.34	483.[illegible]	545.739	525.374	17.33[illegible]	15.279	.4299	16.09	9.77	-34.684	.0780
9	7.6537	469.23	134.10	483.13	545.644	525.5[illegible]2	17.35[illegible]	15.292	.4305	16.05	7.80	-15.370	.0781
10	7.7735	467.40	135.[illegible]	486.[illegible]	545.579	526.935	17.40[illegible]	15.315	.4315	16.09	5.80	-12.847	.0781
11	7.8751	467.11	137.11	486.32	547.335	527.774	17.442	15.348	.4312	16.36	3.60	-10.141	.0782
12	7.9713	465.31	139.32	486.33	545.214	528.635	17.43[illegible]	15.380	.4337	16.65	1.51	-9.609	.0783
13	8.0692	463.50	141.[illegible]	484.72	544.048	529.596	17.51[illegible]	15.436	.4299	16.98	-.15	-7.701	.0784
14	8.1533	459.93	143.[illegible]	481.[illegible]	543.403	530.677	17.54[illegible]	15.459	.4259	17.36	-2.06	-7.182	.0785
15	8.2533	454.54	145.[illegible]	477.[illegible]	550.609	531.790	17.59[illegible]	15.546	.4217	17.74	-3.91	-6.941	.0786
16	8.3574	447.57	147.[illegible]	471.43	551.253	533.182	17.57[illegible]	15.505	.4159	18.29	-5.66	-6.936	.0787
17	8.4713	437.91	151.34	463.34	552.783	535.012	17.55[illegible]	15.562	.4079	19.07	-7.23	-7.197	.0787
18	8.5733	425.[illegible]0	154.[illegible]	452.31	553.822	536.951	17.52[illegible]	15.716	.3930	19.59	-8.55	-7.899	.0787
19	8.6923	411.31	152.52	433.19	553.955	537.989	17.49[illegible]	15.762	.3939	20.34	-9.51	-9.572	.0788
20	8.8034	394.09	143.97	421.[illegible]	553.608	539.092	17.33[illegible]	15.794	.3693	20.53	-9.95	-14.748	.0788
21	8.9340	3[illegible].76	145.[illegible]	39[illegible].[illegible]2	553.495	540.462	17.17[illegible]	15.900	.3475	21.07	-9.38	-1565.883	.0786

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	4.233	-63.135	5.186	.0207	1107.4	.9370	1057.05	27.218	620.105	1.184	[illegible]	.9419	[illegible]
2	-59.445	4.235	-63.477	5.832	.0210	1123.6	.9546	1076.49	27.671	623.005	1.181	[illegible]	[illegible]	[illegible]
3	-59.904	3.873	-65.781	5.877	.0212	1139.6	.9716	1095.31	28.135	626.007	1.178	[illegible]	[illegible]	[illegible]
4	-60.315	3.710	-66.040	5.725	.0214	1155.6	[illegible]	1113.49	28.605	629.108	1.177	[illegible]	[illegible]	[illegible]
5	-60.676	3.235	-66.235	5.581	.0215	1171.4	1.0038	1131.04	29.086	632.145	1.177	[illegible]	[illegible]	[illegible]
6	-60.999	2.831	-66.449	5.450	.0216	1187.1	1.0189	1147.94	29.575	635.190	1.177	[illegible]	.9316	[illegible]
7	-61.294	2.554	-66.630	5.336	.0219	1202.7	1.0333	1164.09	30.069	638.266	1.178	[illegible]	[illegible]	[illegible]
8	-61.570	2.247	-66.817	5.241	.0225	1218.1	1.0466	1179.43	30.566	641.354	1.180	[illegible]	[illegible]	[illegible]
9	-61.858	1.880	-67.017	5.167	.0231	1233.5	1.0597	1194.22	31.074	644.465	1.182	[illegible]	[illegible]	[illegible]
10	-62.122	1.462	-67.239	5.117	.0249	1248.9	1.0716	1208.11	31.575	647.607	1.185	[illegible]	[illegible]	[illegible]
11	-62.398	1.024	-67.490	5.092	.0293	1264.3	1.0814	1220.18	32.025	650.791	1.187	[illegible]	[illegible]	[illegible]
12	-62.681	.593	-67.777	5.096	.0341	1279.7	1.0918	1231.88	32.489	654.029	1.189	.057	[illegible]	[illegible]
13	-62.978	.151	-68.109	5.130	.0389	1295.3	1.1002	1243.39	32.963	657.321	1.192	[illegible]	.8777	[illegible]
14	-63.298	-.331	-68.494	5.196	.0442	1311.0	1.1090	1254.57	33.439	660.710	1.194	.060	.8654	[illegible]
15	-63.648	-.866	-68.944	5.297	.0493	1327.8	1.1179	1265.96	33.938	664.183	1.195	[illegible]	.8577	[illegible]
16	-64.033	-1.337	-69.470	5.436	.0570	1343.3	1.1257	1276.50	34.401	667.769	1.196	.063	.8260	[illegible]
17	-64.458	-1.731	-70.084	5.526	.0688	1360.1	1.1318	1285.55	34.732	671.499	1.195	.066	.7936	[illegible]
18	-64.924	-1.812	-70.809	5.845	.0805	1377.4	1.1384	1295.33	35.287	675.405	1.193	[illegible]	.7613	[illegible]
19	-65.439	-1.936	-71.667	6.228	.0860	1395.4	1.1494	1309.23	35.887	679.515	1.188	[illegible]	[illegible]	[illegible]
20	-66.018	-2.392	-72.637	6.670	.0923	1414.2	1.1615	1324.28	36.434	683.878	1.181	[illegible]	[illegible]	[illegible]
21	-66.634	-3.111	-74.020	7.326	.1030	1434.3	1.1733	1339.46	37.087	688.558	1.169	.067	.6782	.6857

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.185 ISEN. EFF.= .854 POLY. EFF.= .858 DELTA T ON T = .058

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	486.89	342.49	595.28	583.184	553.795	21.712	18.119	.5152	35.12	24.47	60.453	[illegible]
2	7.1632	490.26	338.25	595.62	583.069	553.726	21.693	18.099	.5155	34.68	22.59	[illegible]	.0079
3	7.2471	493.32	334.20	596.28	583.045	553.637	21.675	18.077	.5161	[illegible]	20.63	[illegible]	.0078
4	7.3301	497.67	330.35	597.33	583.031	553.519	21.661	18.053	.5171	33.58	18.60	[illegible]	.0077
5	7.4122	501.93	325.62	598.70	583.018	553.365	21.647	18.025	.5184	33.06	16.53	[illegible]	.0076
6	7.4935	506.23	323.00	600.50	583.003	553.177	21.634	17.994	.5200	32.54	14.44	22.332	.0075
7	7.5742	510.66	319.70	602.48	583.031	553.008	21.620	17.961	.5218	32.05	12.34	[illegible]	[illegible]
8	7.6543	514.78	316.72	604.34	583.104	552.895	21.603	17.926	.5234	31.61	10.24	[illegible]	[illegible]
9	7.7340	518.25	313.49	605.69	583.113	552.768	21.573	17.890	.5247	31.17	8.13	[illegible]	.0070
10	7.8137	520.52	310.70	606.20	583.196	552.881	21.540	17.853	.5251	[illegible]	[illegible]	[illegible]	[illegible]
11	7.8937	519.98	310.47	605.54	583.887	553.478	21.481	17.815	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	7.9740	517.85	309.40	603.24	584.248	554.150	21.402	17.778	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	8.0548	513.92	307.35	599.07	584.592	554.910	21.303	17.741	.5179	[illegible]	[illegible]	[illegible]	[illegible]
14	8.1407	507.56	[illegible]	592.76	584.916	555.856	21.174	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	8.2259	[illegible]	303.56	583.91	[illegible]	[illegible]	21.026	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	8.3161	485.73	302.83	572.40	585.683	558.507	20.853	17.660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	8.4097	466.56	303.63	557.78	[illegible]	561.264	20.654	17.649	.4795	33.23	[illegible]	[illegible]	[illegible]
18	8.5092	441.82	307.51	538.38	[illegible]	[illegible]	20.421	17.649	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	8.6163	[illegible]	300.67	[illegible]	[illegible]	[illegible]	20.133	17.660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	8.7335	[illegible]	292.93	[illegible]	586.675	567.948	[illegible]	17.684	.4167	[illegible]	[illegible]	[illegible]	[illegible]
21	8.8679	316.82	285.92	427.43	586.293	571.188	19.413	17.719	.3643	42.17	-9.38	[illegible]	[illegible]

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.458	-53.473	5.374	.0428	1136.4	.8059	931.28	27.778	625.471	1.477	.124	.9483	.9511
2	-53.085	2.258	-53.373	5.754	.0424	1150.0	.8207	949.29	28.152	628.040	1.476	.124	.9465	.9494
3	-53.532	1.917	-54.226	5.594	.0427	1163.4	.8354	965.14	28.551	630.511	1.475	.124	.9448	.9478
4	-54.139	1.271	-55.546	5.407	.0429	1176.5	.8499	981.89	28.946	633.183	1.474	.124	.9433	.9463
5	-54.604	.432	-53.332	5.228	.0431	1190.0	.8645	998.56	29.345	635.757	1.473	.124	.9418	.9449
6	-55.026	-.073	-50.030	5.064	.0432	1203.0	.8791	1015.23	29.750	638.333	1.472	.124	.9404	.9436
7	-55.406	-.232	-60.327	4.920	.0437	1215.0	.8933	1031.52	30.151	640.915	1.471	.124	.9385	.9417
8	-55.755	-.320	-62.564	4.908	.0450	1228.5	.9071	1047.30	30.546	643.507	1.470	.124	.9354	.9388
9	-55.031	-.239	-61.321	4.740	.0452	1241.5	.9208	1063.01	30.946	646.114	1.468	.124	.9323	.9359
10	-56.330	-.222	-61.120	4.730	.0492	1254.4	.9335	1077.73	31.320	648.744	1.466	.124	.9266	.9304
11	-56.637	-.034	-62.431	4.794	.0564	1267.2	.9426	1089.91	31.573	651.416	1.462	.126	.9189	.9156
12	-56.978	.136	-63.924	4.946	.0682	1280.2	.9519	1100.32	31.838	654.142	1.456	.126	.8954	.9008
13	-57.270	.432	-64.491	5.151	.0775	1293.4	.9610	1111.52	32.039	656.948	1.449	.127	.8788	.8850
14	-57.573	.873	-65.136	5.533	.0850	1306.3	.9693	1122.03	32.344	659.826	1.441	.128	.8599	.8669
15	-57.999	1.350	-65.978	5.979	.0993	1320.7	.9777	1132.89	32.603	662.820	1.431	.128	.8418	.8487
16	-58.202	1.697	-66.900	6.535	.1143	1335.1	.9831	1140.80	32.772	665.952	1.419	.129	.8136	.8226
17	-58.684	2.509	-65.928	7.245	.1360	1350.1	.9833	1143.86	32.760	669.272	1.405	.132	.7741	.7847
18	-59.185	3.334	-67.345	8.161	.1617	1366.1	.9835	1147.05	32.754	672.846	1.390	.134	.7340	.7460
19	-59.787	4.134	-69.114	9.327	.1725	1383.3	.9920	1158.72	33.111	676.736	1.370	.133	.7086	.7212
20	-60.536	4.631	-71.318	10.762	.1850	1402.1	1.0006	1170.78	33.487	681.050	1.348	.131	.6790	.6922
21	-61.540	4.918	-74.426	12.365	.2051	1423.6	1.0057	1180.04	33.753	686.064	1.321	.130	.6347	.6488

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.436 ISEN. EFF.= .855 POLY. EFF.= .862 DELTA T ON T = .127

STATION 7 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	554.56	530.24	733.44	620.935	569.440	25.822	19.792	.6738	42.20	24.87	59.510	.0934
2	7.3315	590.29	523.40	783.96	620.595	569.163	25.743	19.737	.6736	41.57	22.69	-93.326	.0932
3	7.3999	594.51	517.79	788.60	620.429	569.044	25.691	19.703	.6733	41.04	20.52	-31.938	.0931
4	7.4674	598.49	512.87	788.17	620.383	569.053	25.653	19.685	.6730	40.59	18.37	-20.992	.0930
5	7.5342	601.54	509.57	787.71	620.433	569.164	25.642	19.681	.6725	40.21	16.25	-16.727	.0930
6	7.6005	604.09	504.93	787.25	620.574	569.353	25.640	19.688	.6720	39.89	14.17	-14.634	.0930
7	7.6605	606.09	502.03	787.04	620.897	569.716	25.656	19.706	.6715	39.64	12.13	-13.541	.0930
8	7.7323	607.27	500.33	785.88	621.427	570.268	25.685	19.736	.6711	39.49	10.14	-13.031	.0930
9	7.7930	607.39	499.01	785.47	622.012	570.987	26.723	19.776	.6704	39.38	8.20	-12.939	.0931
10	7.8639	606.08	499.97	785.51	622.876	571.898	26.753	19.827	.6690	39.44	6.29	-13.108	.0932
11	7.9305	600.53	503.79	783.81	624.752	573.999	26.780	19.887	.6664	39.99	4.42	-13.714	.0931
12	7.9933	593.11	507.99	780.92	626.564	576.188	26.759	19.958	.6627	40.50	2.60	-14.600	.0931
13	8.0674	583.58	512.22	776.49	628.398	578.597	25.783	20.038	.6575	41.27	.80	-15.935	.0931
14	8.1394	570.97	516.80	770.12	630.350	581.366	26.745	20.129	.6506	42.15	-.98	-17.708	.0931
15	8.2117	555.64	521.13	761.13	632.087	584.246	26.674	20.231	.6419	43.11	-2.74	-20.459	.0931
16	8.2832	533.24	527.09	749.78	634.629	588.240	26.556	20.343	.6297	44.67	-4.46	-24.394	.0930
17	8.3698	500.18	541.03	736.96	638.981	594.079	26.430	20.468	.6159	47.[illegible]	-6.07	-30.715	.0926
18	8.4537	459.53	554.23	720.06	643.129	600.338	26.243	20.605	.5957	50.[illegible]	-7.44	-45.880	.0923
19	8.5578	419.50	551.07	691.97	643.842	604.329	25.927	20.751	.5735	52.78	-8.55	-100.885	.0923
20	8.6578	365.80	547.83	658.86	644.531	608.795	25.547	20.905	.5434	56.[illegible]	-9.36	-556.827	.0923
21	8.8019	285.70	549.23	619.14	646.998	615.374	25.133	21.072	.5085	62.52	-9.37	********	.0921

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-47.590	6.953	.0634	1165.6	.7372	863.73	28.396	631.069	1.825	.197	.9491	.9533
2	-41.086	1.234	-47.312	6.823	.0640	1177.0	.7518	880.65	28.705	633.227	1.820	.196	.9472	.9514
3	-41.715	.593	-48.411	6.593	.0644	1188.0	.7651	896.08	29.020	635.369	1.816	.196	.9455	.9496
4	-42.328	.176	-48.335	6.567	.0645	1198.6	.7773	910.33	29.337	637.582	1.814	.196	.9437	.9482
5	-42.924	-.628	-49.355	6.441	.0649	1209.5	.7886	923.69	29.636	639.932	1.813	.196	.9422	.9460
6	-43.498	-1.133	-49.320	6.322	.0643	1220.2	.7992	935.30	29.973	641.764	1.813	.197	.9400	.9457
7	-44.034	-1.238	-50.248	6.214	.0627	1230.9	.8088	947.81	30.295	643.904	1.814	.197	.9388	.9437
8	-44.533	-1.030	-50.562	6.129	.0675	1241.3	.8171	959.00	30.535	646.056	1.816	.198	.9358	.9410
9	-45.001	-.734	-51.332	6.050	.0643	1251.9	.8249	967.65	30.839	648.225	1.818	.199	.9328	.9383
10	-45.4[illegible]	-.277	-51.529	6.034	.0733	1262.5	.8306	975.16	31.159	650.418	1.821	.201	.9276	.9331
11	-45.8[illegible]1	.302	-52.323	6.153	.0694	1273.2	.8298	975.86	31.224	652.553	1.822	.204	.9183	.9193
12	-46.254	1.031	-52.510	5.375	.1023	1284.0	.8298	976.74	31.306	654.944	1.823	.208	.8975	.9058
13	-46.630	1.919	-53.239	5.609	.1157	1295.1	.8259	976.46	31.372	657.302	1.822	.212	.8819	.8914
14	-47.335	2.937	-54.133	7.035	.1329	1306.5	.8233	974.51	31.398	659.744	1.820	.215	.8644	.8753
15	-47.508	4.125	-55.155	7.549	.1492	1318.3	.8195	972.46	31.437	662.289	1.815	.219	.8470	.8593
16	-47.932	5.404	-56.429	8.497	.1713	1330.5	.8099	964.33	31.307	664.369	1.808	.224	.8221	.8362
17	-48.401	6.756	-58.355	9.667	.2059	1343.7	.7904	945.08	30.534	667.853	1.796	.232	.7856	.8026
18	-48.949	8.141	-60.234	11.265	.2422	1358.0	.7698	925.82	30.432	671.029	1.786	.240	.7491	.7686
19	-49.534	9.415	-63.737	13.443	.2559	1373.7	.7649	922.99	30.534	674.375	1.764	.241	.7277	.7436
20	-50.392	10.336	-65.550	16.227	.2773	1391.5	.7599	920.30	30.533	678.523	1.738	.243	.7033	.7253
21	-51.351	10.840	-71.595	20.337	.3091	1413.0	.7473	903.79	30.508	683.591	1.710	.247	.6670	.6917

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.403 ISEN. EFF.= .857 POLY. EFF.= .868 DELTA T ON T = .214

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	780.98	669.70	1028.80	651.074	563.667	31.403	18.928	.8826	40.61	19.79	-2.228	.0903
2	7.4973	769.70	653.73	1020.25	651.935	565.979	31.503	19.174	.8739	41.03	17.67	-2.385	.0911
3	7.5400	759.16	663.33	1012.45	652.938	568.200	31.613	19.412	.8591	41.43	15.65	-2.585	.0918
4	7.5990	749.31	653.32	1005.11	653.715	570.305	31.725	19.639	.8572	41.80	13.71	-2.827	.0926
5	7.6434	740.22	664.51	998.15	654.531	572.277	31.825	19.852	.8439	42.13	11.83	-3.116	.0933
6	7.6955	731.39	663.35	991.58	655.305	574.119	31.917	20.052	.8430	42.43	10.03	-3.460	.0939
7	7.7431	724.35	663.02	985.04	656.195	575.934	32.013	20.239	.8359	42.73	8.29	-3.868	.0945
8	7.7974	717.05	669.37	981.34	657.299	577.807	32.113	20.417	.8315	43.06	6.61	-4.350	.0950
9	7.8432	710.07	671.27	977.53	658.489	579.610	32.237	20.537	.8271	43.37	4.99	-4.956	.0955
10	7.9015	703.19	674.35	974.29	660.068	581.726	32.352	20.750	.8223	43.80	3.41	-5.711	.0959
11	7.9550	693.15	683.54	970.71	662.979	585.222	32.421	20.915	.8174	44.77	1.88	-6.784	.0961
12	8.0103	679.13	692.93	967.49	665.958	589.729	32.495	21.066	.8123	45.75	.40	-8.093	.0962
13	8.0573	659.02	702.03	963.73	669.060	592.442	32.550	21.223	.8055	46.81	-1.04	-10.229	.0963
14	8.1270	640.91	712.59	958.56	672.361	596.576	32.560	21.350	.7995	48.05	-2.45	-13.920	.0963
15	8.1939	619.34	721.40	950.32	675.364	600.797	32.501	21.540	.7904	49.34	-3.83	-21.551	.0964
16	8.2537	597.12	734.61	940.40	679.485	606.575	32.364	21.706	.7773	51.37	-5.20	-43.457	.0962
17	8.3249	536.00	759.12	929.26	686.250	615.083	32.174	21.937	.7634	54.77	-6.50	-216.173	.0957
18	8.4047	474.44	765.37	915.06	693.813	624.386	32.024	22.040	.7487	58.88	-7.62	147.047	.0951
19	8.4950	422.05	759.73	895.77	696.560	630.450	31.707	22.318	.7270	61.84	-8.50	138.113	.0952
20	8.6017	359.34	793.52	873.41	701.293	637.489	31.435	22.375	.7050	65.78	-9.46	-135.828	.0956
21	8.7339	260.00	823.53	863.75	709.336	647.944	31.470	22.871	.6915	72.44	-9.37	********	.0945

BLADE DATA

LOCAT-ION	BLADE-ANGLES [illegible]	[illegible]	[illegible] ANGLE	DEVIATION [illegible]	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-[illegible].143	[illegible]	-3[illegible]	4.827	.0[illegible]	1195.9	.[illegible]078	941.[illegible]	29.071	536.424	2.137	.255	.9465	.9519
2	[illegible]	[illegible]	-3[illegible]	[illegible]	.0854	1203.7	[illegible]	[illegible]	29.277	538.467	2.144	.257	.9448	.9503
3	[illegible]	2.73[illegible]	-3[illegible]	[illegible]	.0[illegible]3	1211.5	.7368	[illegible]	29.499	540.029	2.152	.259	.9432	.9489
4	[illegible]	[illegible]	-3[illegible]	[illegible]	.0602	1219.4	.7325	[illegible]	29.707	541.512	2.159	.260	.9416	.9476
5	[illegible]	1.730	-3[illegible]	[illegible]	.0[illegible]	1227.4	.7491	[illegible]	29.930	543.218	2.166	.262	.9402	.9463
6	[illegible]	[illegible]	-3[illegible].73[illegible]	[illegible]	.0854	1235.4	.7558	[illegible]	30.150	544.351	2.172	.263	.9387	.9450
7	[illegible]	1.133	-3[illegible]	[illegible]	.0[illegible]73	1243.[illegible]	.[illegible]547	[illegible]	30.331	546.212	2.178	.255	.9366	.9432
8	[illegible]	[illegible]	-3[illegible]	[illegible].717	.0903	1251.5	.7525	[illegible]	30.540	548.204	2.185	.257	.9335	.9404
9	[illegible]	[illegible]	[illegible]	[illegible]	.0924	1260.1	.7566	922.32	30.745	549.[illegible]29	2.194	.270	.9305	.9377
10	-3[illegible]	[illegible]	[illegible]	[illegible]	.0934	1268.6	.7779	[illegible]	30.[illegible]23	551.388	2.201	.273	.9247	.9325
11	-31.[illegible]3	2.[illegible]44	[illegible]	[illegible]	.1179	1277.2	.7555	[illegible].51	30.917	553.498	2.209	.278	.9087	.9182
12	-31.[illegible]	3.[illegible]11	-41.[illegible]	[illegible]	.13[illegible]3	1286.1	.7[illegible]	8[illegible]	30.713	555.374	2.21[illegible]	.284	.8931	.9043
13	-31.[illegible]	[illegible]	-41.[illegible]	[illegible]	[illegible]	1295.2	.74[illegible]1	985.71	30.583	557.320	2.215	.290	.8767	.8896
14	-32.[illegible]	[illegible]	-42.[illegible]	[illegible]	[illegible]	1304.7	.727	[illegible]	30.334	[illegible]9.352	2.216	.296	.8582	.8730
15	-32.[illegible]	[illegible].335	[illegible]	[illegible]	.1975	1314.[illegible]	.7129	957.73	30.215	561.485	2.212	.302	.8390	.8565
16	-33.[illegible]	[illegible]	-42.1[illegible]	[illegible]	[illegible]	1325.0	.[illegible]993	[illegible]	29.930	553.757	2.202	.310	.8131	.8324
17	-33.[illegible]	13.[illegible]51	[illegible].12[illegible]	15.733	.2727	1336.[illegible]	.[illegible]472	757.77	28.933	556.252	2.190	.323	.7738	.7970
18	-33.334	11.942	[illegible]	[illegible]	.[illegible]223	1349.3	.[illegible]006	73[illegible]	28.178	559.095	2.179	.338	.7352	.7621
19	-34.292	12.753	-5[illegible].[illegible]41	[illegible]	[illegible]	1353.[illegible]	.[illegible]730	712.97	27.991	572.369	2.168	.343	.7135	.7423
20	-3[illegible].312	13.312	[illegible]	23.[illegible]	.3693	1330.[illegible]	.[illegible]533	683.90	27.784	576.203	2.[illegible]9	.350	.[illegible]301	.7209
21	-3[illegible].517	13.734	[illegible].735	[illegible]	.4121	1402.5	.[illegible]073	[illegible].57	27.272	531.137	2.141	.368	.6582	.6922

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.131 ISEN. EFF.= .947 POLY. EFF.= .863 DELTA T ON T = .234

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGEN.	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.[illegible]	[illegible]	933.[illegible]	1240.[illegible]	73[illegible].[illegible]83	[illegible]	41.33[illegible]	20.579	1.0503	48.82	10.93	-2.[illegible]4	.0956
2	7.[illegible]	803.41	[illegible]	1228.[illegible]	70[illegible].526	[illegible]41.134	41.2[illegible]	20.849	1.0330	49.15	9.74	-3.274	.0965
3	7.[illegible]24[illegible]	793.04	[illegible]	1218.31	73[illegible]	[illegible]3.713	41.13[illegible]	21.072	1.0273	49.33	8.67	-4.532	.0971
4	7.[illegible]	7[illegible].14	321.[illegible]	121[illegible]	7[illegible]	[illegible].900	41.12[illegible]	21.256	1.0149	49.53	8.01	-6.717	.0977
5	7.7[illegible]	[illegible]	[illegible]	[illegible]	7[illegible].026	[illegible].430	41.0[illegible]	21.406	1.0115	49.60	7.14	-11.427	.0981
6	7.7[illegible]	[illegible]	911.22	11[illegible]	7[illegible]	[illegible]7.[illegible]	40.9[illegible]	21.527	1.00[illegible]	49.60	6.28	-23.131	.0985
7	7.7[illegible]31	772.[illegible]	[illegible]	11[illegible]	705.693	[illegible].905	40.8[illegible]	21.622	.9937	49.[illegible]8	5.41	79.776	.0987
8	7.[illegible]	7[illegible].[illegible]1	[illegible]	1195.30	705.744	[illegible]9.953	40.7[illegible]	21.595	.9[illegible]41	49.25	4.[illegible]4	19.425	.0989
9	7.[illegible]	[illegible]7.10	[illegible].31	1190.[illegible]1	705.793	510.939	40.63[illegible]	21.746	.9[illegible]	49.47	3.[illegible]8	10.695	.0989
10	7.4115	[illegible]	[illegible]	[illegible]	70[illegible].225	[illegible]2.295	40.45[illegible]	21.779	.9[illegible]	49.51	2.61	7.956	.0989
11	7.3[illegible]	[illegible]	[illegible]	1170.23	710.134	[illegible].242	40.131	21.796	.9771	50.15	1.94	5.411	.0984
12	[illegible]	730.40	[illegible]	11[illegible].73	710.071	[illegible].303	39.3[illegible]	21.803	.9701	50.7[illegible]	1.07	5.487	.0980
13	[illegible]	721.[illegible]	[illegible].41	11[illegible]	712.310	531.547	39.5[illegible]	21.801	.9[illegible]52	51.49	.20	4.887	.0974
14	[illegible].10[illegible]1	704.[illegible]2	[illegible]	11[illegible]	71[illegible].174	605.319	39.21[illegible]	21.735	.9563	52.40	-.69	4.477	.0968
15	[illegible]	[illegible]	[illegible]	1150.32	718.099	509.190	38.89[illegible]	21.767	.9493	53.34	-1.60	4.185	.0962
16	[illegible].21[illegible]	[illegible]	[illegible].23	11[illegible].31	723.308	515.135	38.5[illegible]	21.784	.9417	55.11	-2.56	3.973	.0952
17	[illegible].27[illegible]	[illegible]7.93	[illegible].41	11[illegible].37	732.[illegible]	[illegible]	38.133	21.802	.9325	56.49	-3.61	3.863	.0938
18	[illegible]	[illegible]21.[illegible]	1013.02	113[illegible]	742.[illegible]	635.343	37.73[illegible]	21.852	.9208	62.76	-4.73	3.957	.0924
19	[illegible]	472.[illegible]	1323.[illegible]	1133.03	748.412	542.889	37.57[illegible]	21.973	.9195	65.21	-9.02	4.310	.0919
20	[illegible]	405.26	10[illegible]	1123.93	735.139	531.420	37.33[illegible]	22.141	.8[illegible]3	68.69	-7.61	5.12[illegible]	.0914
21	[illegible]	240.97	1373.11	1105.94	735.390	655.593	36.931	22.446	.8739	77.12	-8.95	20.749	.0987

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.931	-18.331	5.104	.1049	1212.1	.7306	862.4[illegible]	29.342	540.134	2.812	.358	.9588	.9567
2	-13.353	10.631	-19.704	5.411	.1053	1217.9	.7213	853.70	29.474	541.310	2.808	.358	[illegible]	[illegible]
3	-14.031	10.334	-20.553	5.742	.1055	1223.9	.7149	847.5[illegible]	29.913	542.223	2.803	.358	[illegible]	[illegible]
4	-14.732	9.730	-21.329	5.747	.1063	1230.1	.7109	844.33	29.754	543.773	2.798	.350	[illegible]	[illegible]
5	-15.507	9.038	-22.360	5.353	.1073	1236.4	.7059	842.73	29.920	545.058	2.794	.360	[illegible]	[illegible]
6	-16.231	8.237	-23.133	5.907	.1074	1242.3	.7087	841.35	30.034	546.377	2.789	.360	[illegible]	[illegible]
7	-16.937	7.609	-23.943	9.920	.1093	1249.5	.7093	844.92	30.234	547.731	2.783	.361	[illegible]	[illegible]
8	-17.666	7.112	-24.733	7.047	.1122	1256.2	.7101	846.47	30.357	549.121	2.774	.361	[illegible]	[illegible]
9	-18.329	5.774	-25.433	7.105	.1133	1263.1	.7122	843.5[illegible]	30.485	550.540	2.765	.361	[illegible]	[illegible]
10	-18.912	5.240	-25.200	7.205	.1229	1270.1	.7123	850.9[illegible]	30.535	552.015	2.754	.362	[illegible]	[illegible]
11	-19.441	5.731	-26.813	7.350	.1472	1277.4	.7015	841.1[illegible]	30.233	553.537	2.733	.365	.9067	[illegible]
12	-19.927	7.119	-27.431	7.524	.1704	1284.3	.6312	829.41	29.937	555.131	2.712	.353	.8895	[illegible]
13	-20.371	7.729	-29.392	7.722	.1945	1292.3	.6798	813.5[illegible]	29.530	556.903	2.690	.373	.8712	[illegible]
14	-20.772	8.581	-29.713	7.942	.2213	1301.0	.6553	803.41	29.315	558.364	2.669	.379	.8594	[illegible]
15	-21.134	9.645	-29.414	8.271	.2470	1309.7	.6506	743.1[illegible]	29.145	560.425	2.646	.384	.8297	[illegible]
16	-21.450	10.619	-30.330	5.555	.2835	1318.3	.6221	757.23	28.258	562.419	2.623	.394	.8082	[illegible]
17	-21.710	12.031	-30.503	3.893	.3445	1329.0	.5663	694.54	27.031	564.533	2.599	.412	.7569	[illegible]
18	-21.900	13.177	-32.146	10.249	.4034	1340.3	.4975	615.43	25.537	567.213	2.572	.432	.7134	[illegible]
19	-21.344	13.035	-34.431	12.467	.4307	1354.4	.4630	575.93	25.443	570.225	2.557	.443	.6988	[illegible]
20	-21.716	13.847	-33.372	10.555	.4620	1370.1	.4159	520.77	24.334	573.757	2.539	.456	.6650	[illegible]
21	-21.371	13.139	-31.337	11.455	.5152	1381.9	.3153	399.04	24.043	578.701	2.510	.477	.6267	.6786

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.692 ISEN. EFF.= .841 POLY. EFF.= .861 DELTA T ON T = .387

STATION 10 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5745	753.74	930.50	1195.74	705.433	587.043	41.312	21.545	1.0073	50.92	7.62	9.349	.0991
2	7.6140	755.54	925.33	1195.22	705.524	587.781	41.2[illegible]	21.5[illegible]	1.0042	50.77	7.79	9.873	[illegible]
3	7.6541	757.53	921.24	1192.70	705.562	588.317	41.133	21.726	1.0017	50.57	7.67	10.551	[illegible]
4	7.6943	760.24	915.53	1190.33	705.597	588.720	41.122	21.739	.9993	50.33	7.48	11.078	[illegible]
5	7.7343	763.49	911.93	1189.34	705.628	589.045	41.05[illegible]	21.743	.9982	50.06	7.24	11.261	[illegible]
6	7.7755	765.95	907.23	1188.02	705.656	589.332	40.941	21.742	.9959	49.79	6.98	11.119	[illegible]
7	7.8155	769.55	902.74	1185.23	705.693	589.720	40.8[illegible]	21.740	.9951	49.55	6.69	10.723	[illegible]
8	7.8572	770.58	899.23	1183.92	705.744	590.303	40.7[illegible]	21.740	.9923	49.38	6.39	10.153	[illegible]
9	7.8993	771.49	893.55	1180.75	705.793	590.893	40.63[illegible]	21.740	.9895	49.20	6.08	9.461	[illegible]
10	7.9393	763.54	891.25	1177.50	706.225	591.961	40.46[illegible]	21.741	.9859	49.19	5.75	8.787	[illegible]
11	7.9821	756.33	895.59	1172.42	708.134	594.659	40.1[illegible]	21.742	.9793	49.81	5.41	7.353	[illegible]
12	8.0258	743.23	899.45	1167.11	710.071	597.843	39.34[illegible]	21.744	.9724	50.45	5.05	7.228	[illegible]
13	8.0703	728.00	905.33	1161.50	712.316	601.123	39.57[illegible]	21.747	.9654	51.20	4.65	6.547	[illegible]
14	8.1177	709.49	913.52	1156.04	715.174	604.336	39.217	21.753	.9533	52.17	4.20	5.918	[illegible]
15	8.1635	683.34	921.55	1151.04	718.099	609.996	39.[illegible]	21.753	.9503	53.20	3.68	5.348	[illegible]
16	8.2173	653.31	939.35	1145.43	723.308	615.118	39.[illegible]	21.792	.9419	55.08	3.06	4.828	[illegible]
17	8.2742	599.15	973.34	1143.03	732.545	625.039	39.133	21.925	.9317	58.62	2.24	4.373	[illegible]
18	8.3333	513.78	1014.93	1137.21	742.686	635.351	37.73[illegible]	21.911	.9187	63.14	1.06	4.038	[illegible]
19	8.4132	451.02	1031.29	1129.62	743.412	643.536	37.57[illegible]	22.051	.9075	65.91	-.62	3.802	[illegible]
20	8.5055	395.43	1050.37	1118.57	755.139	652.303	37.37[illegible]	22.247	.8929	69.85	-2.95	3.596	[illegible]
21	8.6349	211.27	1051.35	1102.23	755.990	656.276	35.63[illegible]	22.525	.8706	78.95	-6.18	3.053	.0989

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0139	825.30	[illegible]	[illegible]	705.483	578.774	41.331	20.594	1.0497	48.25	9.06	26.367	.0957
2	7.0675	849.99	919.42	1251.45	705.524	576.408	41.260	20.260	1.0617	47.28	8.88	33.913	.0945
3	7.7141	861.15	[illegible]	1261.31	705.562	574.336	41.190	19.975	1.0719	46.44	8.61	250.957	.0935
4	7.7531	864.55	[illegible]	1263.38	705.597	572.953	41.12[illegible]	19.764	1.0733	45.78	8.31	-135.409	.0927
5	7.8025	893.04	[illegible]	1272.57	705.628	572.105	41.05[illegible]	19.526	1.0837	45.27	6.00	-59.275	.0922
6	7.8448	902.90	[illegible]	1274.34	705.656	571.760	40.991	19.551	1.0855	44.69	7.70	-41.514	.0919
7	7.8839	906.02	894.71	1273.76	705.693	571.318	40.899	19.523	1.0949	44.62	7.44	-33.125	.0918
8	7.9277	907.02	[illegible]	[illegible]	705.744	572.560	40.767	19.332	1.0913	44.47	7.22	-33.839	.0917
9	7.9690	905.85	[illegible]	[illegible]	705.793	573.424	40.63[illegible]	19.567	1.0777	44.36	7.06	-36.224	.0917
10	8.0093	901.78	[illegible]	[illegible]	706.225	574.903	40.467	19.620	1.0721	44.43	6.95	-43.330	.0918
11	8.0507	897.14	[illegible]	[illegible]	708.134	578.262	40.160	19.685	1.0632	45.03	6.87	-63.188	.0915
12	8.0925	872.38	[illegible]	[illegible]	710.071	581.741	39.94[illegible]	19.757	1.0535	45.56	6.81	-114.870	.0913
13	8.1351	855.17	[illegible]	1240.23	712.316	585.556	[illegible]	19.834	1.0440	46.41	6.75	530.423	.0911
14	8.1734	833.13	[illegible]	1232.73	715.174	589.957	39.217	19.915	1.0339	47.35	6.68	71.235	.0908
15	8.2223	813.06	915.34	[illegible]	719.099	594.542	38.892	20.002	1.0232	48.37	6.57	35.237	.0904
16	8.2658	780.95	[illegible]	1217.[illegible]	723.305	601.219	[illegible]	20.102	1.0117	50.10	6.36	22.504	.0899
17	8.3175	724.72	[illegible]	[illegible]	732.545	611.741	38.133	20.236	.9990	53.26	5.91	16.709	.0893
18	8.3710	649.72	[illegible]	[illegible]	742.580	623.962	[illegible]	20.446	.9901	57.26	4.95	13.920	.0881
19	8.4325	583.07	1024.13	[illegible]	748.412	632.750	37.572	20.778	.9609	60.13	3.30	12.553	.0883
20	8.5041	493.03	[illegible]	1161.35	755.139	644.316	37.331	21.303	.9325	64.77	.68	13.490	.0889
21	8.6133	233.37	1134.35	1133.23	755.390	654.994	36.691	22.375	.8759	77.84	-4.27	-27.461	.0905

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES [illegible]	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	46.817	-33.941	[illegible]	[illegible]	0.0000	0.0	1.0497	1239.76	41.331	705.483	2.812	.340	.9500	.9567
2	47.975	-37.333	47.241	[illegible]	0.0000	0.0	1.0617	1251.45	41.260	705.524	2.808	[illegible]	.9480	.9549
3	47.140	[illegible]	46.443	[illegible]	0.0000	0.0	1.0719	1261.31	41.190	705.562	2.803	.350	.9460	.9531
4	45.314	-31.494	[illegible]	[illegible]	0.0000	0.0	1.0733	1263.38	41.122	705.597	2.798	.350	.9440	.9515
5	46.031	-29.373	45.267	[illegible]	0.0000	0.0	1.0837	1272.57	41.055	705.628	2.794	.360	.9422	.9498
6	[illegible]	-25.257	[illegible]	-.775	0.0000	0.0	[illegible]	1274.34	40.990	705.656	2.763	.360	.9403	.9482
7	45.340	-22.100	[illegible]	[illegible]	0.0000	0.0	[illegible]	1273.76	40.899	705.693	2.783	.361	.9378	.9460
8	45.068	[illegible]	[illegible]	[illegible]	0.0000	0.0	[illegible]	[illegible]	40.757	705.744	2.774	.361	.9342	.9426
9	44.941	[illegible]	[illegible]	-.477	0.0000	0.0	[illegible]	[illegible]	40.635	705.793	2.765	.361	.9305	.9396
10	44.663	[illegible]	44.429	-.233	0.0000	0.0	[illegible]	1262.06	40.467	706.225	2.754	.352	.9240	.9339
11	44.990	[illegible]	[illegible]	.471	0.0000	0.0	[illegible]	[illegible]	40.160	708.134	2.733	.355	.9067	.9188
12	44.929	-5.335	[illegible]	1.152	0.0000	0.0	1.0535	1247.79	[illegible]	710.071	2.712	.359	.8895	.9037
13	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	0.0	[illegible]	1240.23	[illegible]	712.316	2.690	.373	.8712	.8876
14	44.872	1.737	47.354	[illegible]	0.0000	0.0	[illegible]	1232.73	39.217	715.174	2.669	.373	.8504	.8693
15	45.021	[illegible]	[illegible]	3.144	0.0000	0.0	1.0232	1224.70	38.892	719.099	2.646	.394	.8297	.8511
16	45.530	[illegible]	[illegible]	[illegible]	0.0000	0.0	1.0117	1217.60	[illegible]	723.308	2.623	.394	.8002	.8250
17	45.929	13.273	53.259	7.333	0.0000	0.0	.9980	1211.51	38.133	[illegible]	2.599	.412	.7569	.7868
18	46.444	22.459	[illegible]	10.819	0.0000	0.0	.9901	1201.42	37.736	[illegible]	2.572	.432	.7134	.7492
19	47.438	31.104	[illegible]	[illegible]	0.0000	0.0	.9604	1186.09	37.572	[illegible]	2.557	.443	.6905	.7278
20	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	0.0	.9325	1161.35	37.338	755.139	2.539	.456	.6650	.7050
21	50.914	[illegible]	[illegible]	27.933	0.0000	0.0	[illegible]	1103.2	[illegible]	[illegible]	2.510	.477	.6267	.6786

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.69[illegible] ISEN. EFF.= .841 POLY. EFF.= .861 DELTA T ON T = .387

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	1036.99	668.49	1233.79	705.483	579.995	39.981	20.069	1.0435	32.81	5.21	-3.688	.0938
2	7.7531	1018.51	649.54	1208.05	705.524	585.232	39.916	20.574	1.0172	32.53	4.71	-3.449	.0950
3	7.7911	999.84	629.81	1181.66	705.562	590.482	39.847	21.291	.9906	32.21	4.22	-3.261	.0969
4	7.8291	981.16	610.00	1155.32	705.597	595.605	39.766	21.898	.9644	31.87	3.75	-3.123	.0988
5	7.8670	962.45	591.59	1129.71	705.628	600.472	39.659	22.475	.9392	31.58	3.32	-3.052	.1006
6	7.9051	943.02	575.64	1104.52	705.656	605.148	39.522	23.007	.9148	31.37	2.96	-3.015	.1022
7	7.9434	923.01	560.54	1080.40	705.693	609.538	39.342	23.487	.8916	31.25	2.69	-3.007	.1036
8	7.9822	904.69	547.02	1057.21	705.744	613.681	39.128	23.916	.8695	31.10	2.52	-3.017	.1048
9	8.0217	887.27	534.33	1035.76	705.793	617.437	38.924	24.301	.8493	31.06	2.45	-3.048	.1058
10	8.0613	871.02	522.35	1016.35	706.225	621.159	38.733	24.648	.8309	30.96	2.48	-3.073	.1067
11	8.1027	854.85	511.64	996.27	708.134	626.414	38.451	24.961	.8111	30.90	2.57	-3.123	.1071
12	8.1447	838.30	501.77	977.04	710.071	631.489	38.163	25.242	.7923	30.90	2.72	-3.133	.1075
13	8.1870	823.93	494.57	960.95	712.316	636.315	37.949	25.496	.7763	30.97	2.92	-3.241	.1077
14	8.2314	810.25	488.85	946.30	715.174	641.491	37.740	25.722	.7615	31.10	3.13	-3.389	.1078
15	8.2751	797.18	484.27	932.75	718.099	646.528	37.530	25.917	.7477	31.28	3.34	-3.526	.1078
16	8.3217	786.38	482.64	923.10	723.308	653.235	37.349	26.071	.7362	31.52	3.52	-3.724	.1073
17	8.3683	778.31	485.55	917.77	732.545	663.322	37.151	26.169	.7264	31.94	3.54	-4.111	.1061
18	8.4191	771.48	493.24	915.68	742.686	673.823	36.921	26.181	.7192	32.59	3.27	-5.063	.1045
19	8.4695	769.09	505.93	921.17	748.412	678.747	36.789	26.048	.7209	33.39	2.58	-7.905	.1032
20	8.5170	773.55	524.75	934.75	755.139	683.432	36.602	25.723	.7290	34.15	1.26	-43.279	.1012
21	8.5730	783.00	539.23	950.74	765.990	691.858	36.226	25.272	.7371	34.56	-2.03	5.947	.0982

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.847	32.808	.849	.0651	0.0	1.0435	1233.79	39.981	705.483	2.721	.360	.9150	.9259
2	31.572	-23.334	32.531	.859	.0640	0.0	1.0172	1208.05	39.916	705.524	2.716	.360	.9131	.9243
3	31.335	-21.479	32.207	.872	.0633	0.0	.9906	1181.66	39.847	705.562	2.711	.360	.9110	.9225
4	30.992	-19.204	31.870	.888	.0635	0.0	.9644	1155.32	39.766	705.597	2.706	.360	.9087	.9205
5	30.569	-16.978	31.576	.907	.0647	0.0	.9392	1129.71	39.659	705.628	2.699	.360	.9060	.9181
6	30.447	-14.747	31.374	.928	.0684	0.0	.9148	1104.52	39.522	705.656	2.689	.360	.9020	.9145
7	30.305	-12.659	31.254	.949	.0729	0.0	.8916	1080.40	39.342	705.693	2.677	.361	.8971	.9102
8	30.189	-10.616	31.159	.970	.0772	0.0	.8695	1057.21	39.128	705.744	2.663	.361	.8911	.9049
9	30.070	-8.540	31.050	.990	.0812	0.0	.8493	1035.76	38.924	705.793	2.649	.361	.8854	.8999
10	29.955	-6.439	30.953	1.005	.0829	0.0	.8309	1016.35	38.733	706.225	2.636	.362	.8784	.8937
11	29.878	-4.258	30.901	1.024	.0835	0.0	.8111	996.27	38.451	708.134	2.616	.365	.8613	.8791
12	29.865	-2.158	30.901	1.036	.0839	0.0	.7923	977.04	38.163	710.071	2.597	.369	.8455	.8646
13	29.929	-.034	30.973	1.045	.0805	0.0	.7763	960.95	37.949	712.316	2.582	.373	.8300	.8509
14	30.055	2.135	31.105	1.048	.0765	0.0	.7615	946.30	37.740	715.174	2.568	.379	.8125	.8353
15	30.231	4.746	31.278	1.046	.0721	0.0	.7477	932.75	37.530	718.099	2.554	.384	.7951	.8199
16	30.483	7.803	31.523	1.040	.0653	0.0	.7362	923.10	37.349	723.308	2.541	.394	.7702	.7978
17	30.908	11.352	31.942	1.034	.0580	0.0	.7264	917.77	37.151	732.545	2.528	.412	.7320	.7640
18	31.563	15.404	32.593	1.030	.0505	0.0	.7192	915.68	36.921	742.686	2.512	.432	.6933	.7296
19	32.363	19.731	33.333	1.030	.0466	0.0	.7209	921.17	36.789	748.412	2.503	.443	.6729	.7114
20	33.114	24.039	34.152	1.039	.0441	0.0	.7290	934.75	36.602	755.139	2.491	.456	.6495	.6905
21	33.478	28.225	34.557	1.079	.0451	0.0	.7371	950.74	36.226	765.990	2.465	.477	.6129	.6575

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.602 ISEN. EFF.= .808 POLY. EFF.= .832 DELTA T ON T = .387

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	[illegible]	233.43	471.22	[illegible]	627.816	[illegible]	[illegible]	.7893	17.58	-2.23	-5.196	.1098
2	[illegible]	410.30	[illegible]	[illegible]	735.524	630.378	[illegible]	[illegible]	.7754	17.55	-2.42	-5.757	.1107
3	[illegible]	399.31	253.34	440.22	735.562	632.764	[illegible]	25.234	.7617	17.54	-2.59	-6.475	.1115
4	[illegible]	[illegible]	274.34	[illegible]	705.597	635.046	[illegible]	[illegible]	.7486	17.55	-2.71	-7.401	.1121
5	[illegible]	[illegible]	[illegible]	[illegible]	735.528	637.163	[illegible]	26.715	[illegible]	17.55	-2.79	-8.613	.1127
6	[illegible]	[illegible]	271.11	[illegible]	[illegible]	[illegible]	[illegible]	26.910	.7224	17.54	-2.82	-10.232	.1131
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27.070	.7085	17.49	-2.77	-12.403	.1134
8	[illegible]	[illegible]	[illegible]	[illegible]	735.744	644.131	[illegible]	27.137	.6948	17.42	-2.63	-15.644	.1135
9	[illegible]	312.41	[illegible]	351.27	735.793	[illegible]	[illegible]	27.232	.6825	17.38	-2.42	-20.459	.1136
10	[illegible]	[illegible]	[illegible]	[illegible]	735.225	645.039	[illegible]	[illegible]	.6732	17.39	-2.15	-29.247	.1135
11	[illegible]	291.74	[illegible]	[illegible]	735.134	651.500	[illegible]	27.410	.6625	17.43	-1.82	-42.061	.1131
12	[illegible]	[illegible]	[illegible]	[illegible]	710.071	[illegible]	[illegible]	27.442	[illegible]	17.45	-1.45	-71.227	.1126
13	8.1330	[illegible]	[illegible]	[illegible]	712.316	[illegible]	[illegible]	27.452	[illegible]	17.48	-1.05	-153.848	.1122
14	[illegible]	[illegible]	[illegible]	610.20	715.174	661.193	[illegible]	27.474	.6423	17.49	-.66	-692.401	.1117
15	8.2737	[illegible]	[illegible]	[illegible]	[illegible]	664.582	[illegible]	[illegible]	.6333	17.53	-.26	709.918	.1112
16	[illegible]	[illegible]	[illegible]	[illegible]	723.308	[illegible]	[illegible]	[illegible]	.6361	17.60	.07	444.276	.1103
17	8.3713	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27.481	.6343	17.73	.39	753.002	.1089
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6321	17.97	.65	-2421.525	.1073
19	[illegible]	[illegible]	233.21	[illegible]	[illegible]	[illegible]	[illegible]	27.455	.6315	18.30	.85	-1012.640	.1064
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	700.202	[illegible]	27.410	.6307	18.72	.96	503.916	.1052
21	[illegible]	774.38	270.11	[illegible]	[illegible]	710.803	[illegible]	27.323	.6274	19.23	.60	75.314	.1033

BLADE DATA

LOCA-TION	BLADE-ANGLES SECTION	LEAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	15.234	[illegible]	[illegible]	[illegible]	.1274	0.0	.7599	[illegible]	[illegible]	705.463	2.632	.350	.8803	.8953
2	[illegible]	[illegible]	[illegible]	[illegible]	.1270	0.0	[illegible]	[illegible]	[illegible]	[illegible]	2.626	.360	.8778	.8931
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.350	.8752	.8907
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	2.613	[illegible]	.8722	.8881
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	705.528	2.605	[illegible]	.8669	.8851
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.8630	.8799
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.573	.351	.8559	.8736
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	705.744	[illegible]	[illegible]	.8479	.8663
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	2.535	.361	.8401	.8594
10	[illegible]	[illegible]	[illegible]	[illegible]	.1639	0.0	[illegible]	[illegible]	[illegible]	706.225	2.521	.362	.8325	.8526
11	15.502	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	708.134	[illegible]	[illegible]	.8165	.8383
12	15.912	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	710.071	2.483	[illegible]	.8006	.8241
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	712.316	2.474	.373	.7877	.8126
14	[illegible]	[illegible]	[illegible]	[illegible]	.1543	0.0	[illegible]	[illegible]	[illegible]	715.174	[illegible]	.379	.7728	.7993
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7592	.7863
16	15.332	1.330	[illegible]	[illegible]	[illegible]	0.0	.6361	[illegible]	[illegible]	[illegible]	[illegible]	.394	.7375	.7679
17	[illegible]	[illegible]	[illegible]	1.643	.1217	0.0	.6343	[illegible]	[illegible]	[illegible]	2.450	.412	.7340	.7382
18	15.325	[illegible]	[illegible]	[illegible]	.1074	[illegible]	.6321	[illegible]	[illegible]	742.686	2.445	.432	.6782	.7081
19	[illegible]	[illegible]	[illegible]	[illegible]	.1002	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.443	.6524	.6922
20	[illegible]	[illegible]	[illegible]	[illegible]	.0939	0.0	.6307	[illegible]	[illegible]	[illegible]	2.436	.456	.6318	.6739
21	17.513	[illegible]	15.229	1.719	.0859	[illegible]	.6274	[illegible]	[illegible]	[illegible]	2.422	.477	.5993	.6447

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.510 ISEN. EFF.= .774 POLY. EFF.= .801 DELTA T ON T = .387

STATION 1. FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	753.01	81.52	757.59	705.483	654.447	37.372	28.578	.6275	6.18	-4.29	16.241	.1178
2	7.7074	750.11	83.02	754.52	705.524	654.585	37.243	28.542	.6249	6.07	-4.14	16.348	.1176
3	7.7435	777.15	81.23	791.39	705.562	655.328	37.113	28.503	.6222	5.97	-3.96	16.434	.1173
4	7.7807	773.55	79.74	778.08	705.597	655.798	36.973	28.551	.6143	5.88	-3.77	15.488	.1171
5	7.8135	770.54	78.35	774.51	705.628	656.275	36.823	28.515	.6153	5.81	-3.55	16.307	.1168
6	7.8477	761.35	76.52	765.60	705.656	657.410	36.543	28.467	.6088	5.74	-3.30	16.540	.1164
7	7.8831	751.45	74.90	755.13	705.693	658.775	36.221	28.417	.5998	5.68	-3.02	16.688	.1160
8	7.9343	739.61	72.94	743.20	705.744	660.307	35.871	28.367	.5896	5.63	-2.69	17.034	.1155
9	7.9833	725.66	71.24	731.51	705.793	661.775	35.540	28.319	.5797	5.59	-2.31	17.651	.1150
10	8.0232	721.35	70.14	724.75	706.225	663.020	35.325	28.274	.5738	5.55	-1.90	18.526	.1146
11	8.0744	713.24	69.32	715.55	706.134	665.904	35.073	28.234	.5651	5.53	-1.47	19.734	.1140
12	8.1222	704.35	67.94	707.65	710.071	668.892	34.818	28.201	.5578	5.51	-1.04	21.532	.1133
13	8.1712	704.44	67.85	708.20	712.316	671.079	34.774	28.178	.5573	5.50	-.61	24.061	.1129
14	8.2210	705.92	67.37	709.17	715.174	673.931	34.753	28.166	.5570	5.49	-.22	27.445	.1124
15	8.2715	700.45	67.34	703.71	718.099	676.700	34.733	28.155	.5562	5.49	.14	32.170	.1119
16	8.3225	712.47	68.75	715.73	723.308	681.213	34.818	28.174	.5592	5.51	.44	38.947	.1112
17	8.3745	720.30	70.01	723.39	732.545	689.574	34.904	28.132	.5617	5.55	.68	48.941	.1099
18	8.4271	726.79	71.65	730.30	742.686	698.913	34.975	28.217	.5633	5.63	.86	65.776	.1085
19	8.4803	729.05	73.55	732.75	748.412	704.365	35.009	28.250	.5631	5.75	.98	191.804	.1078
20	8.5345	730.17	75.33	734.15	755.139	710.949	35.015	28.238	.5616	5.97	1.05	234.621	.1070
21	8.5903	729.54	80.90	734.15	765.990	721.334	34.955	28.323	.5574	6.33	1.06	-610.607	.1055

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	AIR FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	6.133	2.218	.1910	0.0	.6275	757.59	37.372	705.483	2.543	.360	.8447	.8635
2	3.842	-.939	6.074	2.252	.1912	0.0	.6249	754.52	37.243	705.524	2.534	.350	.8410	.8602
3	3.715	-.932	5.972	2.254	.1922	0.0	.6222	791.39	37.113	705.562	2.525	.360	.8372	.8568
4	3.547	-.854	5.892	2.295	.1943	0.0	.6143	779.0	36.973	705.597	2.516	.360	.8332	.8531
5	3.491	-.771	5.817	2.325	.1975	0.0	.6153	774.51	36.823	705.628	2.506	.360	.8289	.8492
6	3.367	-.637	5.742	2.375	.2074	0.0	.6088	765.60	36.543	705.656	2.487	.360	.8209	.8421
7	3.253	-.510	5.654	2.431	.2159	0.0	.5998	755.19	36.221	705.693	2.465	.361	.8117	.8337
8	3.141	-.540	5.633	2.492	.2306	0.0	.5896	743.20	35.871	705.744	2.441	.361	.8016	.8246
9	3.035	-.479	5.593	2.554	.2419	0.0	.5797	731.51	35.540	705.793	2.418	.361	.7928	.8150
10	2.943	-.425	5.554	2.515	.2459	0.0	.5738	724.75	35.325	706.225	2.404	.362	.7840	.8086
11	2.863	-.374	5.523	2.557	.2455	0.0	.5661	715.55	35.073	706.134	2.387	.365	.7689	.7950
12	2.800	-.335	5.510	2.710	.2504	0.0	.5578	707.65	34.818	710.071	2.369	.369	.7539	.7815
13	2.752	-.221	5.493	2.735	.2415	0.0	.5573	709.20	34.774	712.316	2.366	.373	.7440	.7726
14	2.750	-.150	5.492	2.742	.2312	0.0	.5570	709.17	34.753	715.174	2.365	.379	.7324	.7633
15	2.759	-.147	5.434	2.725	.2202	0.0	.5562	703.71	34.733	718.099	2.363	.384	.7211	.7532
16	2.817	-.254	5.511	2.694	.2025	0.0	.5592	715.73	34.818	723.308	2.369	.394	.7049	.7378
17	2.890	-.336	5.553	2.603	.1831	0.0	.5617	723.39	34.904	732.545	2.375	.412	.6745	.7126
18	2.995	-.633	5.630	2.545	.1625	0.0	.5633	730.30	34.376	742.586	2.380	.432	.6474	.6868
19	3.113	-.620	5.761	2.043	.1525	0.0	.5631	732.75	35.009	748.412	2.382	.443	.6319	.6730
20	3.290	-.370	5.972	2.682	.1432	0.0	.5616	734.15	35.015	755.139	2.383	.456	.6140	.6570
21	3.558	-1.055	6.325	2.818	.1325	0.0	.5574	734.15	34.958	765.990	2.379	.477	.5656	.6316

STATION 1. INTEGRATED PERFORMANCE PRESSURE RATIO = 2.413 ISEN. EFF.= .738 POLY. EFF.= .768 DELTA T ON T = .387

STATION 15 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	[illegible]	[illegible]	[illegible]	705.433	645.826	36.064	26.415	.6328	0.00	-1.06	10.624	.1100
2	[illegible]	[illegible]	[illegible]	[illegible]	705.524	645.332	[illegible]	26.358	[illegible]	0.00	-1.11	11.053	.1096
3	[illegible]	[illegible]	[illegible]	[illegible]	705.552	646.875	[illegible]	26.302	[illegible]	0.00	[illegible]	11.592	.1093
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6732	0.00	-1.46	12.250	.1090
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	648.369	[illegible]	26.197	[illegible]	0.00	-1.39	13.169	.1087
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.150	[illegible]	0.00	-1.29	14.368	.1082
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	651.459	[illegible]	26.107	.6453	0.00	-1.17	[illegible]	.1077
8	[illegible]	[illegible]	[illegible]	[illegible]	705.744	[illegible]	[illegible]	[illegible]	[illegible]	0.00	-1.02	[illegible]	.1073
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	[illegible]	[illegible]	.1068
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.012	[illegible]	0.00	[illegible]	[illegible]	.1065
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	[illegible]	[illegible]	.1059
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	-.27	91.300	.1054
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6031	0.00	-.08	[illegible]	.1051
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	.10	[illegible]	.1048
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.332	[illegible]	0.00	[illegible]	[illegible]	.1044
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	[illegible]	[illegible]	.1039
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6219	0.00	[illegible]	[illegible]	.1028
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	[illegible]	[illegible]	.1017
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	533.710	[illegible]	[illegible]	.6321	0.00	[illegible]	[illegible]	.1010
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.00	[illegible]	-31.037	.1003
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	734.119	[illegible]	25.172	[illegible]	0.00	[illegible]	[illegible]	.0999

[illegible]

STREAM LINE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36.038	735.483	[illegible]	[illegible]	.8083	.9306
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.8033	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.431	[illegible]	.7392	.8215
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735.397	[illegible]	[illegible]	.7929	.8167
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7975	.8117
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7772	.8024
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735.593	[illegible]	[illegible]	.7656	.7917
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735.744	[illegible]	[illegible]	.7534	.7805
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.314	735.793	2.301	[illegible]	.7416	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	736.225	[illegible]	[illegible]	.7338	.7624
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.377	738.134	2.271	[illegible]	.7198	.7497
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7058	.7370
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.373	.6991	.7309
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.253	[illegible]	[illegible]	[illegible]	[illegible]	.7235
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	718.299	2.266	.384	[illegible]	.7161
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.282	[illegible]	.5705	.7057
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33.727	[illegible]	[illegible]	.412	.6471	.6850
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.432	.6231	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	815.47	[illegible]	[illegible]	2.320	.443	.6103	.6525
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34.211	735.139	2.328	[illegible]	[illegible]	.6394
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735.350	2.336	[illegible]	.5717	.6192

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.324 ISEN. EFF.= .701 POLY. EFF.= .734 DELTA T ON T = .387

STATION 16 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------ MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	865.19	0.00	865.19	705.483	643.875	36.063	26.135	.6943	0.00	0.00	0.000	.1091
2	7.6755	859.14	0.00	859.14	705.524	644.776	35.893	26.135	.6896	0.00	-.02	1890.464	.1090
3	7.7143	852.85	0.00	852.85	705.562	645.703	35.723	26.135	.6840	0.00	-.03	1012.058	.1088
4	7.7537	846.30	0.00	846.30	705.597	646.655	35.543	26.134	.6783	0.00	-.05	728.421	.1086
5	7.7938	839.47	0.00	839.47	705.628	647.635	35.359	26.133	.6723	0.00	-.06	595.500	.1085
6	7.8351	826.10	0.00	826.10	705.656	649.500	35.005	26.132	.6607	0.00	-.06	524.610	.1082
7	7.8731	810.61	0.00	810.61	705.693	651.626	34.610	26.130	.6472	0.00	-.07	487.880	.1078
8	7.9227	793.93	0.00	793.93	705.744	653.882	34.193	26.129	.6328	0.00	-.07	475.635	.1074
9	7.9632	777.73	0.00	777.73	705.793	656.023	33.814	26.128	.6130	0.00	-.07	485.767	.1071
10	8.0172	768.75	0.00	768.75	706.225	657.606	33.533	26.126	.6111	0.00	-.07	520.414	.1068
11	8.0667	760.04	0.00	760.04	708.134	660.619	33.377	26.125	.6028	0.00	-.06	587.117	.1063
12	8.1177	750.77	0.00	750.77	710.071	663.714	33.149	26.124	.5941	0.00	-.05	705.472	.1058
13	8.1697	754.31	0.00	754.31	712.316	665.527	33.199	26.123	.5951	0.00	-.04	916.726	.1055
14	8.2224	758.78	0.00	758.78	715.174	667.836	33.263	26.123	.5986	0.00	-.03	1302.152	.1052
15	8.2755	763.30	0.00	763.30	718.099	670.203	33.325	26.122	.6011	0.00	-.02	2135.849	.1048
16	8.3289	775.44	0.00	775.44	723.308	673.891	33.535	26.122	.6090	0.00	-.01	4630.079	.1042
17	8.3825	790.23	0.00	790.23	732.545	681.253	33.757	26.122	.6173	0.00	-.00	33546.875	.1031
18	8.4363	805.43	0.00	805.43	742.686	689.433	33.979	26.122	.6255	0.00	.00	-11594.593	.1019
19	8.4904	813.70	0.00	813.70	748.412	694.080	34.093	26.122	.6293	0.00	.00	-7950.149	.1012
20	8.5450	822.21	0.00	822.21	755.139	699.690	34.211	26.122	.6339	0.00	.00	-10312.963	.1004
21	8.6000	832.98	0.00	832.98	765.990	709.119	34.324	26.122	.6380	0.00	0.00	0.000	.0990

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------ MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	865.85	0.00	865.85	705.483	643.782	36.063	26.122	.6955	0.00	0.00	0.000	.1091
2	7.6755	859.79	0.00	859.79	705.524	644.684	35.893	26.122	.6901	0.00	-.00	0.000	.1089
3	7.7147	853.48	0.00	853.48	705.562	645.614	35.723	26.122	.6846	0.00	-.00	0.000	.1088
4	7.7537	846.90	0.00	846.90	705.597	646.572	35.543	26.122	.6788	0.00	-.00	0.000	.1086
5	7.7938	840.03	0.00	840.03	705.628	647.558	35.359	26.122	.6728	0.00	-.00	0.000	.1084
6	7.8351	826.50	0.00	826.50	705.656	649.432	35.005	26.122	.6611	0.00	-.00	0.000	.1081
7	7.8730	811.05	0.00	811.05	705.693	651.567	34.610	26.122	.6475	0.00	-.00	0.000	.1078
8	7.9227	794.31	0.00	794.31	705.744	653.833	34.193	26.122	.6332	0.00	-.00	0.000	.1074
9	7.9631	778.09	0.00	778.09	705.793	655.983	33.814	26.122	.6192	0.00	-.00	0.000	.1071
10	8.0171	769.00	0.00	769.00	706.225	657.576	33.533	26.122	.6113	0.00	-.00	0.000	.1068
11	8.0666	760.21	0.00	760.21	708.134	660.597	33.377	26.122	.6029	0.00	-.00	0.000	.1063
12	8.1176	750.89	0.00	750.89	710.071	663.599	33.149	26.122	.5942	0.00	-.00	0.000	.1058
13	8.1697	754.37	0.00	754.37	712.316	665.518	33.199	26.122	.5961	0.00	-.00	0.000	.1055
14	8.2223	758.81	0.00	758.81	715.174	667.832	33.263	26.122	.5986	0.00	-.00	0.000	.1052
15	8.2755	763.30	0.00	763.30	718.099	670.203	33.323	26.122	.6011	0.00	-.00	0.000	.1048
16	8.3289	775.44	0.00	775.44	723.308	673.892	33.535	26.122	.6090	0.00	-.00	0.000	.1042
17	8.3825	790.22	0.00	790.22	732.545	681.254	33.757	26.122	.6173	0.00	-.00	0.000	.1031
18	8.4363	805.42	0.00	805.42	742.686	689.435	33.973	26.122	.6255	0.00	-.00	0.000	.1019
19	8.4904	813.70	0.00	813.70	748.412	694.081	34.093	26.122	.6298	0.00	-.00	0.000	.1012
20	8.5443	822.20	0.00	822.20	755.139	699.690	34.211	26.122	.6339	0.00	-.00	0.000	.1004
21	8.6000	832.98	0.00	832.98	765.990	709.119	34.324	26.122	.6390	0.00	0.00	0.000	.0990

ROTOR PERFORMANCE

LOCAT-ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID-ENCE	DEVIA-TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7593	7.5439	1.0451	9.307	6.134	.1049	.4176	.4283	.5336	.7470	.7702	-60.937	-12.647	6.070	10.991
2	[illegible].5315	7.4359	1.1325	8.[illegible]	6.411	.1138	.4379	.4474	.5347	.7277	.7630	-61.339	-13.353	6.231	10.691
3	[illegible].3721	7.5240	1.0791	8.513	6.532	.1065	.4548	.4531	.5320	.7117	.7556	-61.717	-14.071	6.306	10.384
4	7.0521	7.5529	1.1057	5.113	6.747	.1059	.4568	.4761	.5254	.6984	.7482	-62.062	-14.782	6.420	9.750
5	7.1314	7.7315	1.1113	7.453	6.943	.1073	.4804	.4357	.5146	.6873	.7407	-62.366	-15.507	6.325	9.038
6	7.3307	[illegible]	1.1272	7.[illegible]	5.907	.1076	.4879	.4452	.5031	.6793	.7331	-62.644	-16.251	6.046	8.267
7	7.4[illegible]	[illegible].7331	1.1431	[illegible]	6.926	.1090	.4962	[illegible]	.4932	.6702	.7256	-62.911	-16.987	5.581	7.609
8	7.51[illegible]	[illegible].3733	1.1535	[illegible]	7.047	.1122	.5079	[illegible]	.4502	.5627	.7180	-63.173	-17.080	4.934	7.112
9	7.6244	7.3575	1.1735	7.[illegible]	7.155	.1153	.5121	.5149	.4733	.6565	.7104	-63.451	-18.324	4.104	6.774
10	7.7324	7.9115	1.1843	7.[illegible]	7.258	.1226	.5196	.5715	.4536	.6431	.7042	-63.734	-18.912	3.108	6.646
11	7.8405	7.9553	1.2037	7.470	7.333	.1472	.5374	.5387	.4455	.6330	.7034	-64.032	-19.441	1.984	6.761
12	7.9493	8.0035	1.2153	7.437	7.524	.1704	.5536	.5144	.4311	.6177	.7023	-64.349	-19.927	.769	7.119
13	8.0594	8.0525	1.2327	7.415	7.722	.1946	.5706	.5707	.4155	.6020	.7019	-64.689	-20.371	-.553	7.729
14	8.1099	8.1041	1.24[illegible]	7.431	7.942	.2213	.5901	.5594	.4013	.5641	.7033	-65.055	-20.772	-2.015	8.591
15	8.2315	8.1591	1.2[illegible]	7.331	8.232	.2470	.6088	.6075	.3975	.5664	.7044	-65.451	-21.134	-3.600	9.648
16	8.3354	8.2154	1.2752	7.331	8.[illegible]	.2695	.6399	.5350	.3734	.5381	.7123	-65.875	-21.450	-5.136	10.819
17	8.5112	8.2757	1.2493	7.3[illegible]	9.344	.3445	.6933	.5926	.3634	.4881	.7339	-66.335	-21.713	-6.316	12.031
18	8.6294	8.3313	1.3031	7.379	10.243	.4034	.7636	.7176	.3493	.4279	.7355	-66.810	-21.900	-7.035	13.177
19	8.7503	8.4303	1.3175	7.403	12.436	.4307	.7936	.7303	.3407	.3955	.7539	-67.299	-21.944	-7.687	13.885
20	8.8739	8.5344	1.3324	7.324	16.055	.4620	.9361	.3325	.3334	.3934	.7540	-67.798	-21.716	-8.541	13.847
21	9.0000	8.5639	1.3474	7.24[illegible]	30.455	.5152	.9234	.3200	.3318	.2675	.7740	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT-ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID-ENCE	DEVIA-TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5199	7.5401	1.0437	-.752	7.233	.2538	.4685	.4583	.2807	.5863	0.0000	48.517	-7.233	-39.941	.020
2	7.5775	7.5773	1.0517	-.634	7.335	.2523	.4518	.4417	.2904	.6777	0.0000	47.975	-7.386	-37.309	.020
3	7.7141	7.7155	1.0719	-.699	7.542	.2577	.4944	.4944	.2982	.6695	0.0000	47.140	-7.542	-34.452	.019
4	7.7331	7.7745	1.0733	-.739	7.703	.2612	.5056	.5157	.3035	.6627	0.0000	46.514	-7.703	-31.454	.018
5	7.8025	7.8351	1.0337	-.754	7.866	.2658	.5153	.5154	.3050	.6571	0.0000	46.031	-7.865	-28.373	.016
6	7.8445	7.8365	1.0305	-.475	8.023	.2731	.5288	.5269	.3075	.6475	0.0000	45.560	-8.028	-25.257	.014
7	7.8805	7.8797	1.0343	-.714	8.191	.2942	.5427	.5423	.3050	.6374	0.0000	45.340	-8.191	-22.160	.012
8	7.9277	7.9243	1.0319	-.601	8.352	.3033	.5565	.5565	.3079	.6272	0.0000	45.068	-8.352	-19.122	.010
9	7.9935	7.9783	1.0777	-.477	8.533	.3238	.5592	.5592	.3071	.6175	0.0000	44.841	-8.509	-16.098	.009
10	8.0035	8.0187	1.0721	-.239	8.5[illegible]	.3295	.5751	.5760	.3066	.6142	0.0000	44.668	-8.654	-12.806	.007
11	8.0507	8.0580	1.0[illegible]	-.71	8.733	.3313	.5834	.5832	.3031	.6115	0.0000	44.556	-8.783	-9.212	.005
12	8.0925	8.1155	1.0633	1.132	8.834	.3335	.5907	.5904	.3039	.6083	0.0000	44.529	-8.894	-5.395	.003
13	8.1351	8.1705	1.0443	1.751	8.932	.3215	.5979	.5873	.3113	.6149	0.0000	44.626	-8.982	-1.666	.001
14	8.1784	8.2230	1.0339	2.452	9.040	.3084	.5842	.5836	.3143	.6221	0.0000	44.972	-9.040	1.707	-.001
15	8.2223	8.2759	1.0237	3.144	9.062	.2945	.5798	.5792	.3171	.6294	0.0000	45.221	-9.062	5.098	-.004
16	8.2633	8.3231	1.0117	4.515	9.0[illegible]	.2720	.5715	[illegible]	.3205	.6423	0.0000	45.590	-9.059	9.326	-.008
17	8.3175	8.3526	.9963	7.330	9.059	.2471	.5637	.5629	.3224	.6566	0.0000	45.929	-9.059	15.273	-.012
18	8.3713	8.4333	.9931	10.319	9.035	.2200	.5536	.5527	.3223	.6739	0.0000	46.444	-9.095	22.859	-.018
19	8.4325	8.4903	.9699	12.740	9.125	.2055	.5398	.5390	.3153	.6834	0.0000	47.438	-9.125	31.104	-.024
20	8.5041	8.5443	.9325	19.375	9.169	.1935	.5186	.5131	.2945	.7091	0.0000	48.355	-9.169	39.049	-.031
21	8.5199	8.5950	.8759	27.930	9.213	.1762	.4757	.4760	.2543	.7510	0.0000	50.914	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	23.1	23.9	23.9
DIST FACTOR	1.0	1.0	1.0	1.0	.2	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	23.1	23.9	23.9

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 23

TEST POINT TITLE = 301131715890

FLOW = 21.75 SPEED = 16396.4 PRESSURE RATIO = 2.324 ISENTROPIC EFFY = .7011 POLYTROPIC EFFY = .7335 DEL T/T = .3866

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	----ROTOR---- ISEN EFFY	----STAGE---- PRESSURE RATIO	----STAGE---- ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301131715890	CONVERGED AFTER 23 PASSES	21.745	16336.4	2.632	.841	2.324	.701	.57037

8. TEST POINT 301230515695 (95%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0685	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	20.93	0.000	.0730
2	6.2258	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	19.72	0.000	.0730
3	6.3837	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	18.48	0.000	.0730
4	6.5393	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	17.24	0.000	.0730
5	6.6933	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	15.99	0.000	.0730
6	6.8473	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	14.74	0.000	.0730
7	6.9993	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	13.49	0.000	.0730
8	7.1516	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	12.25	0.000	.0730
9	7.3027	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	11.02	0.000	.0730
10	7.4531	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	9.81	0.000	.0730
11	7.6031	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	8.63	0.000	.0730
12	7.7522	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	7.48	0.000	.0730
13	7.9017	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	6.37	0.000	.0730
14	8.0506	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	5.31	0.000	.0730
15	8.1993	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	4.30	0.000	.0730
16	8.3473	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	3.36	0.000	.0730
17	8.4953	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	2.49	0.000	.0730
18	8.6447	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	1.71	0.000	.0730
19	8.7931	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	1.03	0.000	.0730
20	8.9415	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	.45	0.000	.0730
21	9.0930	331.14	0.00	331.14	518.688	509.579	14.696	13.813	.2989	0.00	0.00	0.000	.0730

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3745	361.63	0.00	361.63	518.688	507.824	14.696	13.647	.3270	0.00	20.83	-205.758	.0724
2	6.5135	363.64	0.00	363.64	518.688	507.703	14.696	13.635	.3289	0.00	19.53	-114.615	.0723
3	6.6511	365.40	0.00	365.40	518.688	507.597	14.696	13.625	.3305	0.00	18.23	-82.360	.0723
4	6.7875	366.33	0.00	366.33	518.688	507.503	14.696	13.617	.3319	0.00	16.93	-65.053	.0723
5	6.9231	368.23	0.00	368.23	518.688	507.425	14.696	13.609	.3331	0.00	15.62	-55.491	.0722
6	7.0575	369.29	0.00	369.29	518.688	507.360	14.696	13.603	.3341	0.00	14.32	-48.353	.0722
7	7.1915	370.07	0.00	370.07	518.688	507.311	14.696	13.599	.3348	0.00	13.02	-43.894	.0722
8	7.3253	370.60	0.00	370.60	518.688	507.279	14.696	13.596	.3353	0.00	11.73	-39.451	.0722
9	7.4585	370.84	0.00	370.84	518.688	507.264	14.696	13.594	.3355	0.00	10.45	-35.667	.0722
10	7.5915	370.77	0.00	370.77	518.688	507.268	14.696	13.595	.3354	0.00	9.19	-32.343	.0722
11	7.7245	370.36	0.00	370.36	518.688	507.292	14.696	13.597	.3351	0.00	7.94	-29.364	.0722
12	7.8575	369.65	0.00	369.65	518.688	507.337	14.696	13.601	.3344	0.00	6.73	-26.664	.0722
13	7.9910	368.57	0.00	368.57	518.688	507.404	14.696	13.607	.3334	0.00	5.54	-24.201	.0722
14	8.1249	367.10	0.00	367.10	518.688	507.493	14.696	13.616	.3321	0.00	4.39	-21.952	.0723
15	8.2595	365.25	0.00	365.25	518.688	507.606	14.696	13.626	.3303	0.00	3.29	-19.897	.0723
16	8.3946	363.00	0.00	363.00	518.688	507.742	14.696	13.639	.3283	0.00	2.25	-18.019	.0724
17	8.5312	360.33	0.00	360.33	518.688	507.902	14.696	13.654	.3258	0.00	1.26	-16.296	.0724
18	8.6687	357.24	0.00	357.24	518.688	508.087	14.696	13.672	.3229	0.00	.35	-14.706	.0725
19	8.8075	353.69	0.00	353.69	518.688	508.296	14.696	13.691	.3197	0.00	-.49	-13.226	.0726
20	8.9479	349.66	0.00	349.66	518.688	508.532	14.696	13.713	.3160	0.00	-1.24	-11.834	.0726
21	9.0930	345.10	0.00	345.10	518.688	508.795	14.696	13.738	.3117	0.00	-1.91	-10.518	.0727

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	399.55	0.00	399.55	518.688	505.405	14.695	13.421	.3624	0.00	20.54	-83.031	.0715
2	6.7243	402.55	0.00	402.55	518.688	505.220	14.695	13.403	.3653	0.00	19.15	-78.625	.0715
3	6.8458	405.24	0.00	405.24	518.688	505.046	14.696	13.387	.3674	0.00	17.77	-71.741	.0714
4	6.9665	407.60	0.00	407.60	518.688	504.887	14.695	13.373	.3695	0.00	16.38	-63.786	.0713
5	7.0857	409.68	0.00	409.68	518.688	504.745	14.695	13.360	.3716	0.00	14.99	-55.765	.0713
6	7.2053	411.47	0.00	411.47	518.688	504.625	14.695	13.348	.3732	0.00	13.60	-45.139	.0713
7	7.3254	412.96	0.00	412.95	518.688	504.528	14.695	13.339	.3745	0.00	12.20	-41.254	.0712
8	7.4442	413.85	0.00	413.85	518.688	504.460	14.695	13.333	.3755	0.00	10.80	-35.256	.0712
9	7.5630	414.38	0.00	414.35	518.688	504.423	14.695	13.330	.3760	0.00	9.40	-38.154	.0712
10	7.6818	414.40	0.00	414.40	518.688	504.422	14.695	13.330	.3760	0.00	8.00	-25.680	.0712
11	7.8005	413.80	0.00	413.80	518.688	504.459	14.695	13.333	.3755	0.00	6.61	-22.340	.0712
12	7.9293	412.71	0.00	412.71	518.688	504.538	14.695	13.340	.3744	0.00	5.23	-19.419	.0712
13	8.0404	410.93	0.00	410.93	518.688	504.660	14.695	13.352	.3727	0.00	3.86	-17.015	.0713
14	8.1614	408.48	0.00	408.48	518.688	504.827	14.695	13.367	.3704	0.00	2.52	-15.040	.0713
15	8.2334	405.35	0.00	405.35	518.688	505.038	14.696	13.387	.3675	0.00	1.22	-13.423	.0714
16	8.4057	401.55	0.00	401.55	518.688	505.293	14.695	13.410	.3640	0.00	-.05	-12.117	.0715
17	8.5315	397.11	0.00	397.11	518.688	505.588	14.695	13.438	.3599	0.00	-1.26	-11.086	.0716
18	8.6530	392.05	0.00	392.05	518.688	505.916	14.695	13.468	.3552	0.00	-2.41	-10.287	.0717
19	8.7395	386.54	0.00	386.54	518.688	506.276	14.695	13.502	.3500	0.00	-3.49	-9.677	.0718
20	8.9171	380.54	0.00	380.54	518.688	506.658	14.695	13.537	.3445	0.00	-4.50	-9.191	.0720
21	9.0500	374.11	0.00	374.11	518.688	507.062	14.695	13.575	.3385	0.00	-5.47	-8.690	.0721

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	441.90	0.00	441.90	518.688	502.456	14.695	13.150	.4017	0.00	20.32	-388.054	.0705
2	6.8616	445.39	0.00	445.39	518.688	502.171	14.695	13.123	.4054	0.00	18.93	-383.210	.0704
3	6.9723	449.61	0.00	449.01	518.688	501.895	14.695	13.097	.4089	0.00	17.53	-446.056	.0703
4	7.0824	453.06	0.00	453.05	518.688	501.636	14.695	13.074	.4122	0.00	16.12	-434.348	.0702
5	7.1913	456.23	0.00	456.23	518.688	501.390	14.695	13.052	.4152	0.00	14.68	-292.903	.0701
6	7.3007	459.05	0.00	459.05	518.688	501.132	14.695	13.032	.4173	0.00	13.22	-167.078	.0700
7	7.4083	461.42	0.00	461.42	518.688	501.001	14.695	13.016	.4200	0.00	11.72	-99.745	.0700
8	7.5175	463.25	0.00	463.25	518.688	500.860	14.695	13.003	.4218	0.00	10.20	-64.066	.0699
9	7.6237	464.45	0.00	464.45	518.688	500.757	14.696	12.995	.4229	0.00	8.66	-44.812	.0699
10	7.7340	464.95	0.00	464.95	518.688	500.729	14.695	12.991	.4234	0.00	7.09	-33.018	.0699
11	7.8425	464.56	0.00	464.56	518.688	500.751	14.695	12.993	.4231	0.00	5.51	-25.483	.0699
12	7.9517	463.52	0.00	463.52	518.688	500.839	14.695	13.001	.4220	0.00	3.92	-20.305	.0699
13	8.0613	461.45	0.00	461.45	518.688	500.997	14.695	13.016	.4201	0.00	2.32	-15.444	.0700
14	8.1723	459.38	0.00	459.33	518.688	501.233	14.695	13.037	.4172	0.00	.72	-13.511	.0701
15	8.2844	454.20	0.00	454.20	518.688	501.550	14.695	13.066	.4132	0.00	-.87	-11.268	.0702
16	8.3931	448.55	0.00	448.35	518.688	501.951	14.695	13.103	.4082	0.00	-2.43	-9.584	.0703
17	8.5137	442.38	0.00	442.33	518.688	502.430	14.695	13.146	.4021	0.00	-3.92	-9.415	.0705
18	8.6315	434.38	0.00	434.33	518.688	502.970	14.695	13.196	.3952	0.00	-5.30	-7.787	.0707
19	8.7217	426.39	0.00	426.38	518.688	503.543	14.695	13.248	.3877	0.00	-6.53	-7.417	.0709
20	8.8745	419.97	0.00	419.97	518.688	504.106	14.695	13.300	.3802	0.00	-7.56	-7.763	.0711
21	9.0000	412.12	0.00	412.12	518.688	504.579	14.695	13.344	.3735	0.00	-8.25	-10.317	.0712

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	6.070	-68.837	7.900	0.0000	1141.5	1.1127	1224.05	28.527	626.727	1.000	0.000	1.0000	1.0000
2	-61.342	6.231	-68.980	7.638	0.0000	1160.4	1.1303	1243.09	29.106	630.320	1.000	0.000	1.0000	1.0000
3	-61.722	6.307	-69.127	7.405	0.0000	1179.1	1.1477	1261.91	29.699	633.945	1.000	0.000	1.0000	1.0000
4	-62.068	6.420	-69.280	7.212	0.0000	1197.7	1.1650	1280.53	30.306	637.603	1.000	0.000	1.0000	1.0000
5	-62.373	6.324	-69.438	7.065	0.0000	1216.2	1.1820	1298.97	30.927	641.296	1.000	0.000	1.0000	1.0000
6	-62.650	6.044	-69.604	6.954	0.0000	1234.6	1.1989	1317.21	31.565	645.028	1.000	0.000	1.0000	1.0000
7	-62.917	5.577	-69.783	6.867	0.0000	1253.0	1.2155	1335.25	32.219	648.802	1.000	0.000	1.0000	1.0000
8	-63.183	4.927	-69.979	6.796	0.0000	1271.3	1.2319	1353.07	32.891	652.622	1.000	0.000	1.0000	1.0000
9	-63.454	4.032	-70.193	6.739	0.0000	1289.6	1.2481	1370.69	33.583	656.494	1.000	0.000	1.0000	1.0000
10	-63.736	3.031	-70.430	6.694	0.0000	1307.9	1.2640	1388.09	34.295	660.423	1.000	0.000	1.0000	1.0000
11	-64.034	1.952	-70.692	6.653	0.0000	1326.3	1.2796	1405.31	35.031	664.418	1.000	0.000	1.0000	1.0000
12	-64.352	.742	-70.981	6.629	0.0000	1344.7	1.2950	1422.36	35.792	668.486	1.000	0.000	1.0000	1.0000
13	-64.693	-.536	-71.299	6.606	0.0000	1363.3	1.3102	1439.27	36.581	672.638	1.000	0.000	1.0000	1.0000
14	-65.061	-2.054	-71.651	6.589	0.0000	1382.0	1.3252	1456.06	37.401	676.884	1.000	0.000	1.0000	1.0000
15	-65.460	-3.641	-72.037	6.577	0.0000	1401.0	1.3400	1472.77	38.255	681.236	1.000	0.000	1.0000	1.0000
16	-65.890	-5.170	-72.461	6.571	0.0000	1420.2	1.3546	1489.45	39.148	685.710	1.000	0.000	1.0000	1.0000
17	-66.347	-6.335	-72.920	6.572	0.0000	1439.8	1.3692	1506.19	40.083	690.320	1.000	0.000	1.0000	1.0000
18	-66.822	-7.145	-73.406	6.584	0.0000	1459.7	1.3838	1523.11	41.067	695.081	1.000	0.000	1.0000	1.0000
19	-67.307	-7.696	-73.907	6.600	0.0000	1480.0	1.3987	1540.37	42.103	700.008	1.000	0.000	1.0000	1.0000
20	-67.803	-8.547	-74.402	6.599	0.0000	1500.8	1.4141	1558.16	43.196	705.112	1.000	0.000	1.0000	1.0000
21	-68.316	-9.637	-74.549	6.533	0.0000	1522.0	1.4303	1576.81	44.343	710.391	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8979	493.27	140.62	512.32	545.928	524.086	17.420	15.107	.4566	15.91	22.32	6.199	.0776
2	6.9935	495.77	136.54	514.31	545.581	523.621	17.381	15.052	.4590	15.43	20.67	5.980	.0774
3	7.0935	498.46	133.72	516.09	545.344	523.231	17.345	15.005	.4595	15.02	18.96	8.267	.0772
4	7.1973	501.44	131.32	518.35	545.231	522.923	17.324	14.967	.4619	14.68	17.24	10.477	.0771
5	7.2953	504.62	129.59	520.99	545.238	522.703	17.315	14.937	.4644	14.40	15.45	14.734	.0770
6	7.3942	507.64	128.37	523.62	545.343	522.579	17.313	14.918	.4668	14.19	13.61	25.530	.0769
7	7.4914	510.07	127.69	525.91	545.550	522.596	17.331	14.909	.4687	14.05	11.72	103.071	.0768
8	7.5892	511.70	127.64	527.38	545.868	522.796	17.350	14.913	.4700	14.01	9.78	-48.564	.0768
9	7.6845	512.66	127.96	528.39	546.303	523.123	17.379	14.930	.4708	14.01	7.80	-19.421	.0769
10	7.7813	512.90	128.94	528.95	546.862	523.642	17.415	14.961	.4710	14.11	5.79	-12.150	.0770
11	7.8780	512.14	131.54	528.77	547.785	524.576	17.463	15.004	.4705	14.40	3.78	-8.941	.0770
12	7.9751	510.98	134.46	528.38	548.801	525.624	17.515	15.060	.4697	14.74	1.77	-7.233	.0772
13	8.0729	509.07	137.83	527.40	549.933	526.843	17.579	15.127	.4682	15.15	-.21	-6.265	.0773
14	8.1715	505.96	141.75	525.44	551.212	528.294	17.640	15.203	.4659	15.65	-2.13	-5.737	.0775
15	8.2713	501.54	145.21	522.14	552.414	529.784	17.694	15.283	.4623	16.15	-3.97	-5.516	.0777
16	8.3726	494.92	148.92	516.84	553.699	531.527	17.723	15.365	.4569	16.75	-5.70	-5.552	.0779
17	8.4767	485.41	153.10	508.99	555.126	533.624	17.735	15.443	.4490	17.50	-7.26	-5.871	.0780
18	8.5839	473.10	155.84	495.11	556.247	535.655	17.705	15.515	.4386	18.23	-8.54	-6.632	.0780
19	8.6950	458.27	154.24	483.53	556.342	536.938	17.635	15.573	.4253	18.60	-9.48	-8.346	.0781
20	8.8110	439.02	150.85	464.21	556.008	538.123	17.504	15.610	.4073	18.96	-9.90	-13.497	.0781
21	8.9340	411.63	145.89	436.72	555.284	539.455	17.280	15.615	.3832	19.51	-9.38	-1665.883	.0780

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	4.233	-64.371	5.375	.0164	1166.5	1.0133	1138.31	29.046	531.502	1.186	.053	.9505	.9517
2	-59.444	4.235	-64.559	5.211	.0171	1183.5	1.0314	1158.16	29.569	534.909	1.183	.052	.9468	.9488
3	-59.962	4.374	-64.334	5.092	.0177	1200.4	1.0489	1177.42	30.102	538.142	1.180	.051	.9433	.9446
4	-60.312	3.712	-65.213	4.901	.0183	1217.2	1.0659	1196.09	30.647	541.498	1.173	.051	.9401	.9415
5	-60.574	3.237	-65.445	4.755	.0188	1233.9	1.0822	1214.14	31.202	544.576	1.178	.051	.9373	.9387
6	-60.996	2.992	-65.557	4.671	.0193	1250.4	1.0978	1231.55	31.769	548.274	1.179	.051	.9347	.9362
7	-61.293	2.594	-65.479	4.556	.0201	1266.3	1.1126	1248.17	32.341	551.695	1.179	.052	.9314	.9329
8	-61.375	2.245	-66.116	4.545	.0215	1283.3	1.1264	1263.83	32.913	555.145	1.181	.052	.9260	.9278
9	-61.552	1.875	-66.357	4.515	.0229	1299.6	1.1394	1277.67	33.497	558.530	1.182	.053	.9212	.9238
10	-62.127	1.453	-66.330	4.503	.0249	1315.9	1.1515	1293.64	34.083	562.156	1.185	.054	.9147	.9167
11	-62.405	1.011	-66.305	4.495	.0274	1332.3	1.1615	1305.36	34.620	565.737	1.188	.056	.8993	.9017
12	-62.932	.575	-67.177	4.455	.0344	1348.7	1.1709	1317.[illegible]	35.175	569.368	1.192	.058	.8857	.8885
13	-62.993	.123	-67.473	4.430	.0395	1365.2	1.1797	1325.76	35.734	573.069	1.196	.060	.8713	.8745
14	-63.316	-.358	-67.505	4.459	.0459	1381.9	1.1875	1334.57	36.277	576.849	1.200	.063	.8538	.8575
15	-63.555	-.695	-68.134	4.526	.0520	1398.8	1.1954	1350.15	36.845	580.722	1.204	.065	.8375	.8417
16	-64.056	-1.411	-69.053	4.595	.0602	1415.9	1.2024	1360.24	37.373	584.708	1.206	.067	.8155	.8204
17	-64.451	-1.733	-69.236	4.757	.0717	1433.5	1.2080	1369.33	37.843	588.538	1.207	.070	.7850	.7986
18	-64.945	-1.913	-69.347	4.939	.0829	1451.6	1.2147	1379.45	38.356	593.149	1.205	.072	.7548	.7612
19	-65.456	-1.953	-70.333	5.347	.0892	1470.4	1.2257	1393.67	39.066	597.674	1.200	.073	.7362	.7429
20	-65.323	-2.430	-71.353	5.861	.0943	1490.0	1.2351	1403.30	39.837	702.460	1.191	.072	.7118	.7188
21	-66.394	-3.111	-73.218	5.974	.1042	1510.8	1.2510	1425.67	40.505	707.503	1.176	.071	.6709	.6784

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.191 ISEN. EFF.= .848 POLY. EFF.= .852 DELTA T ON T = .068

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0734	514.65	375.73	637.27	593.330	549.659	23.140	18.854	.5491	36.13	24.47	69.453	.0907
2	7.1634	517.99	372.12	637.50	593.469	559.762	23.137	18.846	.5495	35.69	22.59	65.610	.0907
3	7.2475	521.50	365.67	638.55	593.964	559.846	23.137	18.837	.5502	35.26	20.63	60.863	.0906
4	7.3307	525.31	362.42	639.91	593.657	553.907	23.140	18.825	.5512	34.82	18.61	52.597	.0906
5	7.4129	529.45	362.32	641.55	594.354	559.330	23.14[illegible]	18.809	.5525	34.38	16.54	42.386	.0905
6	7.4944	533.66	359.30	643.51	594.249	559.315	23.143	18.789	.5543	33.94	14.43	32.670	.0904
7	7.5752	535.29	355.70	645.74	594.510	559.939	23.153	18.766	.5562	33.53	12.31	24.661	.0903
8	7.6555	542.17	354.00	647.65	594.875	550.075	23.152	18.742	.5580	33.19	10.17	18.617	.0901
9	7.7354	545.33	352.32	649.53	595.162	550.168	23.141	18.714	.5593	32.85	8.02	14.323	.0900
10	7.8152	548.00	350.11	650.29	595.465	550.436	23.113	18.683	.5599	32.57	5.86	11.331	.0898
11	7.8954	547.55	350.0[illegible]	649.33	596.242	551.216	23.059	18.649	.5592	32.59	3.73	9.305	.0895
12	7.9754	545.37	349.02	646.30	595.805	551.994	22.979	18.613	.5571	32.59	1.62	7.970	.0892
13	8.0557	542.25	347.71	644.15	597.313	552.914	22.871	18.576	.5534	32.67	-.43	7.126	.0889
14	8.1425	535.37	345.95	639.21	597.957	554.192	22.733	18.541	.5477	32.93	-2.40	6.643	.0885
15	8.2233	525.59	345.07	624.53	598.363	565.506	22.564	18.510	.5336	33.24	-4.28	6.466	.0882
16	8.3162	513.08	344.51	619.07	599.119	567.455	22.364	18.497	.5293	33.89	-6.03	6.583	.0878
17	8.4115	493.44	345.89	603.15	600.549	570.398	22.131	18.474	.5143	35.10	-7.58	7.024	.0872
18	8.5113	469.06	347.45	582.33	601.660	573.439	21.855	18.473	.4952	36.59	-8.83	7.952	.0868
19	8.6132	438.37	339.40	554.40	600.755	575.283	21.521	18.487	.4712	37.75	-9.71	10.038	.0866
20	8.7349	399.05	330.3[illegible]	518.06	599.658	577.415	21.143	18.515	.4395	39.62	-10.07	15.788	.0864
21	8.8579	340.44	322.45	468.92	598.922	580.700	20.683	18.556	.3957	43.45	-9.38	1665.883	.0861

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.585	2.458	-57.324	5.419	.0333	1197.0	.8358	969.19	29.771	637.469	1.575	.144	.9614	.9638
2	-53.085	2.288	-58.318	5.233	.0346	1211.4	.8497	986.27	30.211	640.333	1.574	.144	.9598	[illegible]
3	-53.632	1.915	-58.678	5.046	.0357	1225.6	.8642	1003.16	30.658	643.197	1.574	.145	.9568	[illegible]
4	-54.139	1.206	-59.000	4.861	.0368	1239.7	.8786	1019.95	31.118	646.063	1.575	.145	.9547	.9575
5	-54.604	.486	-59.289	4.684	.0377	1253.6	.8930	1036.69	31.567	648.931	1.575	.145	.9526	[illegible]
6	-55.029	-.074	-59.549	4.520	.0386	1267.4	.9074	1053.39	32.030	651.802	1.575	.146	.9502	[illegible]
7	-55.411	-.284	-59.787	4.375	.0402	1281.1	.9214	1069.66	32.486	654.679	1.575	.146	.9476	[illegible]
8	-55.763	-.320	-60.024	4.260	.0430	1294.6	.9346	1085.12	32.921	657.567	1.575	.147	.9430	.9466
9	-56.092	-.268	-60.288	4.186	.0457	1308.1	.9478	1100.53	33.363	660.473	1.575	.147	.9384	.9422
10	-56.402	-.228	-60.575	4.172	.0497	1321.6	.9604	1115.43	33.785	663.405	1.573	.149	.9328	[illegible]
11	-56.699	-.035	-60.930	4.230	.0595	1335.2	.9698	1127.13	34.086	666.388	1.569	.150	.9177	[illegible]
12	-56.988	.142	-61.364	4.376	.0657	1348.9	.9795	1139.23	34.402	669.416	1.564	.151	.9036	.9094
13	-57.275	.471	-61.989	4.614	.0790	1362.8	.9887	1150.85	34.708	672.529	1.556	.152	.8876	[illegible]
14	-57.572	.882	-62.524	4.952	.0918	1377.0	.9963	1161.01	34.941	675.739	1.547	.153	.8675	[illegible]
15	-57.893	1.361	-63.289	5.397	.1042	1391.6	1.0042	1171.53	35.204	679.072	1.535	.154	.8475	[illegible]
16	-58.252	1.900	-64.215	5.963	.1208	1406.7	1.0093	1179.52	35.371	682.559	1.522	.155	.8210	[illegible]
17	-58.675	2.524	-65.358	6.683	.1440	1422.5	1.0101	1183.46	35.378	686.254	1.506	.158	.7853	[illegible]
18	-59.179	3.322	-66.797	7.619	.1665	1439.4	1.0112	1188.00	35.424	690.225	1.487	.160	.7497	[illegible]
19	-59.788	4.146	-68.590	8.803	.1770	1457.4	1.0206	1200.90	35.846	694.542	1.464	.158	.7269	.7412
20	-60.543	4.685	-70.814	10.271	.1890	1477.2	1.0301	1214.24	36.384	699.317	1.438	.156	.7084	.7153
21	-61.540	4.918	-73.870	12.330	.2085	1499.7	1.0367	1225.43	36.671	704.831	1.407	.155	.6620	.6778

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.538 ISEN. EFF.= .865 POLY. EFF.= .873 DELTA T ON T = .151

STATION 7 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	616.01	572.44	840.93	635.247	576.685	29.176	20.777	.7130	42.90	24.87	59.518	.0970
2	7.3314	621.92	565.30	840.44	634.894	576.399	29.072	20.708	.7136	42.27	22.68	-114.515	.0968
3	7.3937	626.81	559.34	840.09	634.740	576.294	29.002	20.662	.7134	41.74	20.40	-34.793	.0966
4	7.4671	630.80	554.26	839.70	634.733	576.340	28.955	20.636	.7130	41.30	18.31	-22.723	.0964
5	7.5339	634.09	549.91	839.33	634.851	576.512	28.931	20.626	.7126	40.93	16.16	-18.124	.0964
6	7.6001	636.88	546.25	839.05	635.092	576.791	28.925	20.630	.7122	40.62	14.06	-15.922	.0963
7	7.6660	639.03	543.85	839.12	635.504	577.275	28.943	20.647	.7119	40.40	12.08	-14.839	.0963
8	7.7317	640.03	543.06	839.37	636.415	578.073	28.979	20.678	.7117	40.31	9.99	-14.625	.0963
9	7.7975	640.48	542.64	839.45	637.322	578.971	29.027	20.721	.7112	40.27	8.03	-14.526	.0964
10	7.8635	639.34	543.24	838.97	638.455	580.175	29.073	20.776	.7100	40.35	6.12	-15.083	.0965
11	7.9301	633.45	546.09	837.66	640.544	582.451	29.100	20.842	.7076	40.67	4.24	-16.081	.0964
12	7.9978	626.23	552.34	835.01	642.531	584.810	29.112	20.919	.7039	41.41	2.41	-17.644	.0963
13	8.0669	616.35	555.96	830.72	644.640	587.518	29.035	21.006	.6987	42.18	.61	-19.934	.0963
14	8.1379	602.22	563.22	824.55	647.170	590.908	29.050	21.106	.6915	43.08	-1.17	-23.144	.0962
15	8.2114	585.18	568.21	815.66	649.472	594.417	28.962	21.218	.6821	44.16	-2.91	-27.873	.0961
16	8.2883	561.07	576.17	804.22	652.538	599.025	28.827	21.343	.6699	45.76	-4.60	-35.883	.0960
17	8.3703	520.60	589.86	790.72	657.059	605.341	28.654	21.482	.6553	48.24	-6.17	-47.341	.0956
18	8.4596	484.77	601.73	772.71	661.336	611.961	28.413	21.635	.6369	51.14	-7.51	-79.856	.0955
19	8.5581	442.11	597.15	742.99	661.896	616.258	28.024	21.799	.6103	53.49	-8.59	-245.817	.0953
20	8.6689	387.63	591.53	707.23	662.385	621.033	27.560	21.971	.5787	56.76	-9.36	1009.199	.0953
21	8.8019	307.20	591.88	666.14	664.478	627.791	27.055	22.158	.5422	62.54	-9.37	**********	.0951

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.412	-45.755	5.357	.0503	1228.1	.7637	899.63	30.563	643.695	1.985	.225	.9613	.9649
2	-41.339	1.244	-47.124	5.234	.0521	1239.8	.7790	917.48	30.915	645.090	1.978	.224	.9587	.9625
3	-41.722	.355	-47.331	5.103	.0535	1251.4	.7929	933.70	31.268	648.468	1.973	.224	.9562	.9602
4	-42.337	.133	-48.321	5.954	.0553	1262.8	.8055	948.63	31.622	650.337	1.970	.224	.9539	.9580
5	-42.935	-.624	-48.733	5.854	.0567	1274.1	.8172	962.53	31.980	653.202	1.969	.224	.9516	.9559
6	-43.511	-1.131	-49.245	5.734	.0591	1285.3	.8281	975.68	32.341	655.370	1.968	.224	.9493	.9539
7	-44.048	-1.239	-49.594	5.616	.0604	1296.4	.8376	987.20	32.685	657.147	1.969	.225	.9462	.9511
8	-44.540	-1.092	-50.063	5.517	.0646	1307.5	.8453	997.01	32.935	660.339	1.972	.227	.9414	.9467
9	-45.012	-.737	-50.455	5.453	.0697	1318.6	.8524	1006.16	33.309	662.751	1.975	.229	.9367	.9425
10	-45.453	-.281	-50.935	5.442	.0749	1329.8	.8579	1013.62	33.587	665.191	1.978	.231	.9302	.9366
11	-45.875	.298	-51.331	5.506	.0842	1341.1	.8573	1014.92	33.673	667.077	1.980	.235	.9156	.9233
12	-46.284	1.025	-51.933	5.609	.1031	1352.5	.8566	1016.09	33.771	670.223	1.981	.239	.9014	.9104
13	-46.695	1.913	-52.337	5.952	.1194	1364.2	.8547	1015.64	33.830	672.943	1.980	.243	.8856	.8960
14	-47.035	2.950	-53.471	6.355	.1377	1376.2	.8495	1011.74	33.788	675.559	1.977	.248	.8658	.8780
15	-47.439	4.121	-54.511	7.007	.1502	1389.6	.8427	1007.74	33.762	678.395	1.971	.252	.8464	.8603
16	-47.922	5.435	-55.790	7.375	.1810	1401.6	.8314	998.10	33.570	681.388	1.962	.259	.8207	.8368
17	-48.395	6.755	-57.470	9.075	.2158	1415.5	.8116	979.29	33.114	684.511	1.950	.267	.7868	.8050
18	-48.948	8.154	-59.579	10.731	.2494	1430.6	.7915	960.24	32.630	688.156	1.934	.275	.7521	.7738
19	-49.547	9.427	-62.523	12.926	.2653	1447.3	.7871	959.21	32.795	692.108	1.907	.276	.7317	.7547
20	-50.360	13.313	-65.033	15.751	.2834	1466.0	.7827	956.53	32.913	696.507	1.875	.277	.7086	.7330
21	-51.301	13.833	-71.103	13.74	.3127	1488.5	.7721	943.54	32.843	702.083	1.841	.281	.6761	.7023

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.956 ISEN. EFF.= .861 POLY. EFF.= .874 DELTA T ON T = .245

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	848.48	687.42	1092.03	652.393	563.565	33.552	19.025	.9382	39.05	19.79	-2.220	.0909
2	7.4977	835.65	688.50	1082.75	653.341	566.253	33.643	19.309	.9274	39.49	17.65	-2.373	.0918
3	7.5464	823.54	688.85	1073.56	654.354	568.941	33.753	19.585	.9175	39.91	15.59	-2.558	.0927
4	7.5954	812.13	689.14	1065.11	655.395	571.403	33.863	19.849	.9082	40.32	13.62	-2.782	.0936
5	7.6448	801.45	688.13	1056.39	656.305	573.847	33.964	20.098	.8994	40.69	11.72	-3.048	.0943
6	7.6947	791.01	688.97	1049.42	657.226	576.093	34.057	20.332	.8913	41.03	9.89	-3.362	.0951
7	7.7452	782.26	689.56	1042.78	658.322	578.347	34.155	20.552	.8833	41.39	8.13	-3.729	.0957
8	7.7954	772.75	691.57	1037.08	659.773	580.780	34.253	20.762	.8773	41.83	6.43	-4.164	.0963
9	7.8433	764.22	694.23	1032.50	671.350	583.155	34.383	20.963	.8716	42.25	4.79	-4.688	.0968
10	7.9003	755.15	699.35	1029.59	673.273	585.756	34.510	21.157	.8664	42.76	3.21	-5.338	.0973
11	7.9544	740.39	708.02	1024.43	676.464	589.666	34.587	21.346	.8601	43.72	1.67	-6.169	.0975
12	8.0101	725.70	717.71	1020.71	679.724	593.572	34.673	21.533	.8541	44.68	.19	-7.279	.0977
13	8.0671	709.69	723.39	1016.40	683.269	597.859	34.731	21.719	.8475	45.78	-1.26	-8.880	.0979
14	8.1263	690.73	741.40	1010.58	687.422	603.006	34.725	21.906	.8391	47.19	-2.66	-11.461	.0979
15	8.1882	661.76	752.73	1002.26	691.283	608.277	34.652	22.096	.8280	48.68	-4.03	-16.281	.0978
16	8.2538	625.90	767.35	990.03	696.144	615.074	34.463	22.292	.8149	50.82	-5.34	-27.526	.0976
17	8.3294	572.50	791.90	977.19	703.257	624.408	34.193	22.502	.7975	54.14	-6.58	-69.465	.0971
18	8.4059	509.10	816.30	962.05	710.746	634.357	33.928	22.733	.7730	58.05	-7.62	355.184	.0965
19	8.4973	454.10	817.66	935.30	713.147	640.965	33.475	22.987	.7535	60.95	-8.52	94.988	.0966
20	8.6030	387.68	821.30	907.49	716.438	648.506	33.054	23.269	.7269	64.84	-9.35	2593.632	.0966
21	8.7359	295.99	842.05	889.23	724.586	659.389	32.894	23.589	.7055	71.24	-9.37	*********	.0964

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.853	-33.354	9.811	.0673	1259.7	.8783	1022.90	31.438	650.205	2.283	.277	.9576	[illegible]
2	-24.927	2.833	-34.737	9.810	.0696	1267.9	.8710	1016.89	31.753	651.917	2.290	.279	.9551	[illegible]
3	-25.687	2.733	-35.494	9.807	.0718	1276.2	.8644	1011.51	31.882	653.547	2.297	.281	.9528	[illegible]
4	-26.443	2.300	-36.243	9.800	.0738	1284.5	.8586	1006.95	32.126	655.401	2.304	.283	.9501	[illegible]
5	-27.202	1.713	-36.983	9.787	.0756	1292.8	.8538	1003.37	32.355	657.181	2.311	.285	.9477	[illegible]
6	-27.955	1.223	-37.722	9.707	.0774	1301.3	.8500	1000.79	32.600	658.990	2.317	.286	.9452	[illegible]
7	-28.672	1.132	-38.412	9.740	.0804	1309.8	.8462	999.34	32.820	660.832	2.324	.288	.9419	[illegible]
8	-29.333	1.235	-39.049	9.713	.0861	1318.4	.8417	994.99	33.003	662.710	2.331	.291	.9366	[illegible]
9	-29.937	1.577	-39.632	9.695	.0913	1327.2	.8377	992.39	33.136	664.527	2.340	.294	.9314	[illegible]
10	-30.488	2.048	-41.183	9.695	.0944	1336.1	.8326	988.42	33.319	666.586	2.343	.298	.9242	[illegible]
11	-30.991	2.677	-40.717	9.727	.1190	1345.2	.8201	976.84	33.132	668.502	2.354	.304	.9081	[illegible]
12	-31.453	3.448	-41.269	9.815	.1374	1354.6	.8080	965.58	33.077	670.587	2.359	.310	.8926	[illegible]
13	-31.879	4.432	-41.931	10.012	.1579	1364.2	.7940	952.77	32.902	672.852	2.361	.317	.8752	[illegible]
14	-32.274	5.693	-42.662	10.307	.1836	1374.2	.7754	933.06	32.584	675.114	2.363	.325	.8534	[illegible]
15	-32.649	7.026	-43.982	11.034	.2082	1384.7	.7565	915.06	32.277	677.498	2.358	.333	.8319	[illegible]
16	-33.009	8.438	-45.094	12.086	.2413	1395.8	.7290	885.62	31.734	680.043	2.345	.342	.8032	[illegible]
17	-33.383	10.047	-47.096	13.713	.2677	1407.3	.6863	840.97	30.925	682.340	2.327	.356	.7643	[illegible]
18	-33.817	11.592	-49.930	16.113	.3324	1421.5	.6404	790.87	29.344	686.017	2.309	.370	.7268	[illegible]
19	-34.315	12.775	-53.750	19.435	.3530	1437.0	.6187	767.97	29.746	689.564	2.278	.375	.7046	[illegible]
20	-34.848	13.394	-58.954	23.809	.3773	1454.9	.5942	741.78	29.532	693.325	2.249	.391	.6809	[illegible]
21	-35.617	13.234	-65.764	30.147	.4170	1477.3	.5535	696.69	29.035	639.356	2.236	.397	.6497	.6863

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.321 ISEN. EFF.= .845 POLY. EFF.= .862 DELTA T ON T = .321

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	376.83	392.46	1324.32	725.317	583.491	45.557	21.335	1.1177	48.54	10.63	-2.464	.0985
2	7.5850	361.55	387.52	1310.72	728.266	586.373	45.415	21.951	1.1035	48.83	9.70	-3.284	.0995
3	7.6230	843.93	982.49	1299.10	728.219	588.536	45.275	21.310	1.0914	43.14	8.80	-4.587	.1002
4	7.6613	340.31	377.35	1289.15	728.169	590.921	45.131	22.122	1.0812	49.30	7.91	-5.936	.1008
5	7.6935	333.50	372.21	1280.59	728.118	592.691	45.937	22.253	1.0724	49.39	7.02	-12.412	.1013
6	7.7336	428.82	365.98	1273.25	728.066	594.193	45.855	22.429	1.0643	49.42	6.14	-33.812	.1017
7	7.7302	323.50	361.60	1266.03	727.996	595.628	45.665	22.334	1.0577	49.42	5.26	41.970	.1019
8	7.8219	317.59	355.00	1258.00	727.331	597.216	45.373	22.510	1.0495	49.46	4.38	14.849	.1020
9	7.8645	313.08	350.33	1250.63	727.765	598.626	45.077	22.561	1.0422	49.45	3.50	9.424	.1020
10	7.9033	307.36	345.52	1244.73	728.170	600.254	44.790	22.890	1.0353	49.52	2.63	7.103	.1018
11	7.9535	795.73	353.52	1241.33	730.842	603.514	44.543	22.781	1.0308	50.15	1.76	5.826	.1013
12	8.0004	784.03	360.05	1239.58	733.547	606.723	44.293	22.698	1.0261	50.76	.89	5.032	.1008
13	8.0433	709.52	967.30	1236.06	736.468	610.380	43.952	22.686	1.0201	51.50	.01	4.503	.1001
14	8.1007	747.17	975.15	1229.28	739.842	615.168	43.427	22.668	1.0106	52.57	-.87	4.147	.0993
15	8.1321	723.42	984.34	1222.07	743.311	620.126	42.891	22.651	1.0007	53.70	-1.77	3.912	.0984
16	8.2135	687.75	1004.91	1217.64	749.441	627.196	42.417	22.642	.9915	55.61	-2.71	3.760	.0972
17	8.2741	627.82	1043.10	1217.46	750.043	637.915	42.039	22.662	.9831	58.96	-3.70	3.739	.0957
18	8.3526	550.79	1082.82	1214.86	771.402	649.886	41.635	22.734	.9721	63.04	-4.77	3.927	.0942
19	8.4383	503.09	1099.80	1209.40	777.946	657.577	41.405	22.869	.9621	65.42	-5.99	4.424	.0937
20	8.5372	434.35	1119.50	1200.92	785.621	667.025	41.135	23.071	.9485	68.79	-7.34	5.984	.0932
21	8.6699	279.35	1151.85	1195.24	797.496	632.067	40.711	23.421	.9261	76.37	-8.95	20.749	.0925

BLADE DATA

STREAM LINE	[illegible]	[illegible]	[illegible]	DEVIATION ANGLE	LOSS COEF.	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-[illegible]6.6[illegible]	10.9[illegible]1	-17.[illegible]	[illegible].31[illegible]	.083[illegible]	1[illegible]70.[illegible]	.7760	321.77	31.317	553.774	3.165	.404	.9613	.9670
2	-14.33[illegible]	11.[illegible]	-13.31[illegible]	[illegible]	.086[illegible]	1[illegible]92.9	.7670	911.05	31.348	555.064	3.155	.404	.9585	.9646
3	-14.13[illegible]	11.[illegible]	-1[illegible].[illegible]	[illegible].30[illegible]	.0890	1[illegible]4.1	.7591	903.56	32.039	556.395	3.149	.404	.9558	.9622
4	-[illegible].738	[illegible]	-20.[illegible]	[illegible].194	.0912	1[illegible]	.7533	891.61	32.235	557.755	3.139	.404	.9531	.9599
5	-[illegible].4[illegible]1	[illegible].377	-21.[illegible]	[illegible].143	.0940	1[illegible]2.1	.7507	895.4[illegible]	32.33[illegible]	559.175	3.130	.404	.9503	.9576
6	-1[illegible].136	[illegible].31[illegible]	-[illegible]	[illegible]	.09[illegible]	1305.3	.7495	890.10	32.343	560.526	3.120	.404	.9476	.9552
7	-1[illegible].31[illegible]	7.[illegible]	-[illegible]	[illegible]	.1002	1313.7	.7469	895.5[illegible]	32.633	562.110	3.107	.404	.9439	.9520
8	-17.[illegible]	[illegible].1[illegible]	-[illegible].13[illegible]	[illegible]	.1073	1320.3	.7477	895.17	32.734	563.550	3.087	.403	.9360	.9470
9	-[illegible].[illegible]1	[illegible].733	-[illegible]	[illegible]	.1142	1330.	.7475	897.3[illegible]	32.532	565.230	3.06	.403	.9322	.9419
10	-1[illegible]	[illegible].7	-[illegible].73[illegible]	[illegible]	.12[illegible]	1337.4	.7469	897.40	32.543	566.660	3.046	.404	.9243	.9351
11	-1[illegible]	[illegible].7[illegible]	-[illegible].[illegible]7	[illegible].315	.14[illegible]	1345.[illegible]	.7360	[illegible]	32.529	568.353	3.031	.409	.9072	.9284
12	-1[illegible].47[illegible]	7.[illegible]	-[illegible]	[illegible].7[illegible]	.1715	1353.0	.7260	8[illegible]7.01	32.27[illegible]	570.321	3.014	.414	.8904	.9059
13	-[illegible].3[illegible]	[illegible]	-[illegible].1	5.7[illegible]	.1974	1361.2	.7135	864.4[illegible]	31.541	572.174	2.991	.420	.8713	.8893
14	-[illegible].71[illegible]	[illegible].524	-27.[illegible]	7.[illegible]	.2290	1351.9	.6344	[illegible]4.58	31.275	574.133	2.955	.426	.8470	.8682
15	-2[illegible].341	[illegible].[illegible]8	-21.[illegible]	7.[illegible]	.2613	1374.1	.5746	823.04	30.715	576.221	2.919	.433	.8228	.8470
16	-[illegible]	1[illegible].[illegible]	-23.13	[illegible]	.301[illegible]	1389.0	.5415	787.70	29.953	578.475	2.886	.443	.7911	.8194
17	-[illegible]	1[illegible]	-[illegible].1	[illegible]	.339[illegible]	1[illegible]9.[illegible]	.5331	722.13	28.920	[illegible]30.3[illegible]	2.861	.455	.7488	.7824
18	-[illegible]1.93[illegible]	1[illegible].[illegible]57	-3[illegible].30[illegible]	[illegible]	.41[illegible]	1412.5	.5136	541.92	27.203	[illegible]33.910	2.833	.437	.7073	.7460
19	-[illegible]1.[illegible]	11.[illegible]	-33.34[illegible]	11.353	.4418	1427.[illegible]	.4774	630.1[illegible]	26.721	[illegible]37.306	2.817	.500	.6851	.7264
20	-[illegible]1.73[illegible]	1[illegible].[illegible]	-3[illegible].73[illegible]	1[illegible].063	.4721	14[illegible].7	.4282	542.64	26.133	591.265	2.739	.515	.6604	.7046
21	-[illegible]1.[illegible]1	1[illegible].1[illegible]	-4[illegible].37[illegible]	[illegible]	.5212	14[illegible]	.3266	421.[illegible]	25.234	[illegible]36.548	2.771	.533	.6248	.6731

STATION [illegible] INTEGRATED PERFORMANCE PRESSURE RATIO = 2.[illegible] ISEN. EFF. = .841 POLY. EFF. = .[illegible]63 DELTA T ON T = .435

STATION 11 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY AXIAL	VELOCITY TANG.	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.574[illegible]	[illegible]3.53	934.23	1274.4[illegible]	7[illegible]8.317	593.349	45.55[illegible]	22.631	1.0703	50.69	7.82	9.349	.1027
2	[illegible].5134	[illegible]9.5[illegible]	9[illegible]3.95	1[illegible]74.[illegible]	7[illegible]3.256	534.184	45.41[illegible]	22.679	1.0693	50.55	7.78	9.637	.1028
3	7.552[illegible]	311.2	97[illegible]	1271.17	7[illegible]4.21[illegible]	5[illegible]9.805	45.27[illegible]	22.599	1.0625	50.35	7.66	10.158	.1028
4	7.[illegible]	313.6[illegible]	4[illegible]3.3[illegible]	[illegible]	7[illegible]5.1[illegible]	535.234	45.13[illegible]	22.702	1.0603	50.12	7.48	10.482	.1027
5	7.73[illegible]	310.7[illegible]	455.11	1[illegible]8.23	723.115	5[illegible].[illegible]08	4[illegible].947	22.694	1.0573	49.86	7.26	10.518	.1026
6	7.7727	319.22	[illegible]	1264.21	728.[illegible]	54[illegible]	4[illegible]	22.682	1.0557	49.61	7.02	10.295	.1025
7	[illegible].5131	[illegible]20.5[illegible]	[illegible]57.55	1[illegible]91.[illegible]	7[illegible]7.[illegible]	[illegible]6.5[illegible]7	[illegible]	22.569	1.0527	49.40	6.75	9.890	.1023
8	[illegible].8[illegible]	[illegible]13.53	[illegible].12	122[illegible]	727.391	547.[illegible]	45.3[illegible]	22.558	1.0477	49.28	6.47	9.361	.1021
9	7.594[illegible]	[illegible]17.97	44[illegible]	1201.1	727.765	[illegible]48.[illegible]	45.077	22.350	1.0425	49.17	6.17	8.744	.1019
10	7.[illegible]	[illegible]	[illegible]	1[illegible]	723.170	5[illegible]9.6[illegible]3	44.[illegible]	22.542	1.0370	4[illegible].19	5.66	8.082	.1017
11	7.[illegible]	[illegible]13.04	[illegible]	1[illegible].35	733.[illegible]	603.016	44.54[illegible]	22.635	1.0332	49.60	5.54	7.413	.1011
12	[illegible]24	[illegible]91.[illegible]	[illegible]7.45	1[illegible]2.11	733.[illegible]7	605.202	44.25[illegible]	[illegible].030	1.02[illegible]	50.43	5.18	6.761	.1006
13	8.[illegible]	775.[illegible]	[illegible]5.12	123[illegible]	736.408	609.932	43.952	22.527	1.022[illegible]	51.2[illegible]	4.60	5.143	.0999
14	[illegible].11[illegible]	[illegible].91	17[illegible]	1239.86	739.642	614.847	43.427	22.527	1.0122	52.35	4.37	5.570	.0991
15	[illegible].16[illegible]	[illegible].4[illegible]	33[illegible]	1222.74	743.311	619.990	42.691	22.533	1.0014	53.58	4.05	5.045	.0983
16	[illegible]21[illegible]	537.47	10[illegible]	1217.22	749.441	627.201	42.41[illegible]	22.553	.9911	55.61	3.22	4.576	.0973
17	[illegible]737	523.74	1043.[illegible]	121[illegible]	750.043	638.241	4[illegible].93[illegible]	22.702	.961[illegible]	59.14	2.36	4.174	.0958
18	[illegible].3[illegible]	[illegible].14	11[illegible]	1211.[illegible]	771.402	[illegible]50.457	41.63[illegible]	22.305	.96[illegible]3	63.43	1.17	3.371	.0944
19	[illegible].17[illegible]	[illegible]30.76	1102.55	1205.2[illegible]	777.940	658.407	41.40[illegible]	22.769	.9542	66.18	-.54	3.641	.0940
20	[illegible]	[illegible]3.14	11[illegible]3.37	11[illegible]5.31	73[illegible].621	668.076	41.13[illegible]	23.199	.3437	63.99	-2.89	3.406	.0935
21	[illegible].65[illegible]	[illegible]3.32	115[illegible]	1[illegible]30.07	7[illegible]7.436	552.959	40.71[illegible]	23.529	.9213	73.23	-6.16	3.053	.0928

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6199	902.15	982.35	1333.81	728.317	581.361	46.557	21.068	1.1277	47.44	8.86	26.367	.0976
2	7.6692	924.95	977.11	1345.47	728.268	578.722	46.416	20.676	1.1401	46.57	8.91	47.848	.0962
3	7.7128	944.94	971.05	1354.94	728.219	576.553	46.275	20.349	1.1503	45.78	8.68	134.739	.0951
4	7.7574	959.66	965.23	1361.25	728.169	575.080	46.136	20.111	1.1571	45.16	8.40	-247.221	.0942
5	7.8007	969.88	959.64	1364.39	728.118	574.318	45.997	19.963	1.1606	44.70	8.12	-69.567	.0936
6	7.8430	975.87	954.23	1364.87	728.066	574.157	45.856	19.887	1.1611	44.36	7.84	-43.914	.0933
7	7.8846	977.77	948.87	1362.49	727.996	574.625	45.666	19.868	1.1586	44.14	7.58	-34.387	.0931
8	7.9250	975.17	943.45	1356.85	727.891	575.792	45.372	19.891	1.1527	44.05	7.38	-31.513	.0931
9	7.9672	970.82	938.09	1350.00	727.785	577.223	45.077	19.945	1.1454	44.02	7.22	-31.760	.0931
10	8.0054	963.34	934.93	1342.90	728.170	579.196	44.790	20.019	1.1375	44.13	7.10	-35.035	.0931
11	8.0498	950.10	942.10	1338.00	730.842	582.977	44.540	20.105	1.1297	44.76	7.02	-42.241	.0929
12	8.0919	935.49	949.23	1332.73	733.547	586.870	44.289	20.198	1.1215	45.42	6.95	-58.208	.0927
13	8.1345	917.48	957.17	1325.66	736.468	591.326	43.952	20.296	1.1116	46.21	6.89	-111.312	.0924
14	8.1781	892.28	965.91	1315.70	739.842	596.954	43.427	20.399	1.0979	47.30	6.80	1083.544	.0920
15	8.2230	865.05	976.82	1304.79	743.311	602.820	42.891	20.508	1.0835	48.47	6.67	77.179	.0916
16	8.2696	827.37	997.99	1296.36	749.441	610.817	42.417	20.633	1.0695	50.34	6.43	37.646	.0910
17	8.3133	768.63	1037.97	1291.55	760.043	622.538	42.039	20.800	1.0556	53.48	5.91	25.432	.0904
18	8.3742	692.00	1080.02	1282.70	771.482	635.860	41.636	21.057	1.0374	57.35	4.88	20.493	.0892
19	8.4357	628.91	1100.14	1267.21	777.946	645.747	41.405	21.453	1.0172	60.25	3.17	18.418	.0895
20	8.5079	529.72	1123.35	1241.99	785.621	658.716	41.136	22.075	.9872	64.75	.53	21.167	.0903
21	8.6199	281.63	1158.53	1192.27	797.496	680.688	40.719	23.254	.9325	76.34	-4.27	-27.461	.0920

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.541	47.438	-1.320	0.0000	0.0	1.1277	1333.81	46.557	728.317	3.168	.404	.9613	.9670
2	47.971	-37.356	46.571	-1.400	0.0000	0.0	1.1401	1345.47	46.416	728.268	3.158	.404	.9585	.9646
3	47.127	-34.538	45.781	-1.346	0.0000	0.0	1.1503	1354.94	46.275	728.219	3.149	.404	.9558	.9622
4	46.489	-31.568	45.160	-1.329	0.0000	0.0	1.1571	1361.25	46.136	728.169	3.139	.404	.9531	.9599
5	46.001	-28.504	44.696	-1.305	0.0000	0.0	1.1606	1364.39	45.997	728.118	3.130	.404	.9503	.9576
6	45.629	-25.335	44.358	-1.271	0.0000	0.0	1.1611	1364.87	45.856	728.066	3.120	.404	.9476	.9552
7	45.311	-22.296	44.141	-1.170	0.0000	0.0	1.1586	1362.49	45.666	727.996	3.107	.404	.9439	.9520
8	45.041	-19.248	44.053	-.988	0.0000	0.0	1.1527	1356.85	45.372	727.891	3.087	.403	.9380	.9478
9	44.818	-16.171	44.018	-.800	0.0000	0.0	1.1454	1350.00	45.077	727.785	3.067	.403	.9322	.9419
10	44.649	-12.903	44.127	-.522	0.0000	0.0	1.1375	1342.90	44.790	728.170	3.048	.404	.9243	.9351
11	44.542	-9.292	44.758	.216	0.0000	0.0	1.1297	1338.00	44.540	730.842	3.031	.409	.9072	.9204
12	44.520	-5.456	45.418	.898	0.0000	0.0	1.1215	1332.73	44.289	733.547	3.014	.414	.8904	.9059
13	44.621	-1.711	46.213	1.592	0.0000	0.0	1.1116	1325.66	43.952	736.468	2.991	.420	.8713	.8893
14	44.874	1.683	47.299	2.425	0.0000	0.0	1.0979	1315.70	43.427	739.842	2.955	.426	.8470	.8682
15	45.230	5.109	48.473	3.242	0.0000	0.0	1.0835	1304.79	42.891	743.311	2.919	.433	.8228	.8470
16	45.604	9.413	50.340	4.736	0.0000	0.0	1.0695	1296.36	42.417	749.441	2.886	.445	.7911	.8194
17	45.945	15.494	53.478	7.533	0.0000	0.0	1.0556	1291.55	42.039	760.043	2.861	.465	.7488	.7824
18	46.471	23.204	57.351	10.880	0.0000	0.0	1.0374	1282.70	41.636	771.482	2.833	.487	.7073	.7460
19	47.494	31.497	60.245	12.751	0.0000	0.0	1.0172	1267.21	41.405	777.946	2.817	.500	.6851	.7264
20	48.941	39.406	64.754	15.813	0.0000	0.0	.9872	1241.99	41.136	785.621	2.795	.515	.6604	.7046
21	50.814	46.652	76.337	25.523	0.0000	0.0	.9325	1192.27	40.719	797.496	2.771	.538	.6248	.6731

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.988 ISEN. EFF.= .841 POLY. EFF.= .863 DELTA T ON T = .435

STATION 12 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	---VELOCITIES--- MERI	TANGENT	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.715	1097.15	707.[illegible]	1305.38	726.317	587.580	44.569	20.335	1.0973	32.81	5.21	-3.688	.0960
2	7.7531	1075.15	695.27	1276.35	728.268	593.740	44.453	21.564	1.0673	32.53	4.73	-3.421	.0983
3	7.7511	1054.38	664.[illegible]	1246.[illegible]	728.219	599.911	44.331	22.407	1.0377	32.20	4.25	-3.214	.1006
4	7.9230	1033.51	642.31	1216.84	728.169	605.932	44.131	[illegible]	1.0079	31.86	3.79	-3.070	.1029
5	7.5097	1012.04	621.83	1187.[illegible]	728.119	611.669	44.02[illegible]	23.334	.9793	31.57	3.37	-2.985	.1050
6	7.9044	989.77	603.37	1159.13	728.055	617.17[illegible]	43.739	24.474	.9515	31.37	3.00	-2.947	.1069
7	7.9429	957.30	593.95	1131.46	727.995	622.357	43.515	25.050	.9249	31.25	2.73	-2.942	.1084
8	7.9515	944.03	571.14	1103.57	727.691	627.354	43.153	25.562	.8958	31.16	2.55	-2.959	.1096
9	8.0210	923.66	553.30	1078.25	727.765	631.872	42.807	26.018	.8743	31.06	2.48	-2.993	.1109
10	8.0512	905.34	543.71	1059.90	728.170	636.221	42.521	26.425	.8537	30.96	2.50	-3.040	.1119
11	8.1022	893.61	53[illegible]	1037.02	730.842	642.157	42.257	26.749	.8347	30.90	2.59	-3.107	.1124
12	8.1441	874.20	523.[illegible]	1019.[illegible]	733.547	647.852	42.014	27.113	.8170	30.90	2.74	-3.197	.1127
13	8.1939	861.94	519.75	1004.11	736.463	653.365	41.795	27.402	.8013	30.97	2.93	-3.313	.1130
14	8.2307	844.03	504.55	989.49	739.942	659.669	41.443	27.656	.7835	31.10	3.13	-3.448	.1129
15	8.2724	825.35	503.44	969.77	743.311	665.843	41.035	27.869	.7667	31.27	3.33	-3.625	.1127
16	8.[illegible]	813.34	501.73	959.93	749.441	673.572	40.393	28.031	.7547	31.52	3.46	-3.881	.1121
17	8.3330	812.79	505.41	957.54	760.043	684.590	40.635	28.127	.7459	31.93	3.46	-4.365	.1107
18	8.4159	829.54	519.33	953.34	771.402	695.741	40.504	28.118	.7423	32.56	3.13	-5.542	.1069
19	8.4024	876.62	532.04	967.95	777.946	710.953	40.333	27.936	.7462	33.34	2.39	-9.271	.1073
20	8.5112	915.15	552.33	985.53	735.621	705.343	40.212	27.529	.7572	34.09	1.03	-175.532	.1051
21	8.5739	924.57	571.35	1007.30	737.496	714.220	39.845	26.964	.7694	34.56	-2.03	[illegible].947	.1017

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELAT VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.397	-24.847	32.369	.543	.0731	0.0	1.0973	1305.38	44.569	726.317	3.033	.404	.9188	.9304
2	31.065	-23.395	32.725	.500	.0762	0.0	1.0673	1276.35	44.453	728.268	3.025	.404	.9166	.9284
3	31.320	-21.413	32.139	.573	.0750	0.0	1.0377	1246.59	44.331	728.219	3.017	.404	.9141	.9262
4	30.971	-13.[illegible]	31.550	.399	.0743	0.0	1.0079	1216.84	44.191	728.169	3.007	.404	.9113	.9238
5	[illegible]	[illegible]	31.353	.383	.0755	0.0	.9793	1187.81	44.028	728.118	2.995	.404	.9079	.9209
6	30.458	-14.771	31.550	[illegible]	.0732	0.0	.9515	1159.19	43.749	728.065	2.980	.404	.9031	.9167
7	30.233	-17.659	31.250	.351	.0833	0.0	.9249	1131.46	43.510	727.996	2.961	.404	.8972	.9115
8	30.1[illegible]	-13.520	31.158	.372	.0871	0.0	.8949	1103.57	43.153	727.941	2.936	.403	.8896	.9049
9	30.063	-9.575	31.060	.431	.0903	0.0	.8743	1078.25	42.807	727.735	2.913	.403	.8824	.8985
10	29.[illegible]	-[illegible].440	33.364	1.009	.0915	0.0	.8537	1059.90	42.521	728.173	2.893	.404	.8743	.8914
11	29.477	-4.234	33.402	1.025	.0931	0.0	.8347	1037.57	42.255	730.842	2.876	.409	.8576	.8769
12	29.454	-2.196	33.301	1.037	.094[illegible]	0.0	.8170	1019.52	42.014	733.547	2.859	.414	.8412	.8626
13	29.328	-.118	30.773	1.045	.0910	0.0	.8013	1004.11	41.743	736.468	2.844	.420	.8251	.8485
14	30.054	2.114	31.103	1.049	.0859	0.0	.7835	986.40	41.443	739.942	2.820	.426	.8049	.8308
15	30.228	4.734	31.274	1.047	.0803	0.0	.7567	969.77	41.035	743.311	2.796	.433	.7849	.8132
16	30.475	7.770	31.[illegible]15	1.041	.0715	0.0	.7547	959.93	40.833	749.441	2.780	.445	.7590	.7904
17	30.333	11.332	31.325	1.035	.0633	0.0	.7469	957.64	40.635	760.043	2.769	.459	.7221	.7582
18	31.532	13.335	32.562	1.031	.0550	0.0	.7423	953.34	40.504	771.402	2.756	.437	.6858	.7263
19	32.311	19.749	33.343	1.032	.0510	0.0	.7462	967.95	40.338	777.946	2.748	.500	.6661	.7090
20	33.349	24.055	34.089	1.040	.0435	0.0	.7572	985.53	40.212	735.521	2.736	.515	.6436	.6891
21	33.479	25.225	34.557	1.079	.0498	0.0	.7694	1007.30	39.848	737.496	2.711	.538	.6096	.6588

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.867 ISEN. EFF.= .804 POLY. EFF.= .630 DELTA T ON T = .435

STATION 13 FLOW FIELD DESCRIPTION

STRL M -LIN.	RADIUS	---VELOCITIES--- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	970.41	307.55	1017.98	728.317	642.854	42.653	27.472	.8189	17.58	-2.23	-5.196	.1151
2	7.7552	954.38	301.34	1000.39	728.268	645.643	42.525	27.817	.8035	17.55	-2.43	-5.790	.1160
3	7.7832	939.36	295.80	984.75	728.219	648.256	42.391	28.132	.7889	17.54	-2.59	-6.560	.1169
4	7.8219	924.09	292.22	969.20	728.169	650.718	42.239	28.414	.7750	17.55	-2.72	-7.574	.1176
5	7.8565	909.32	287.85	954.27	728.118	653.039	42.064	28.561	.7617	17.56	-2.80	-8.929	.1182
6	7.8921	893.52	282.45	937.20	728.066	655.655	41.768	28.869	.7466	17.54	-2.81	-10.794	.1186
7	7.9239	877.17	276.39	919.68	727.996	658.272	41.414	29.039	.7312	17.49	-2.75	-13.461	.1188
8	7.9671	859.37	269.35	901.31	727.891	660.930	40.993	29.169	.7152	17.42	-2.60	-17.451	.1189
9	8.0068	844.32	264.23	884.71	727.785	663.271	40.598	29.264	.7008	17.38	-2.37	-23.871	.1188
10	8.0479	832.76	260.73	872.64	728.170	665.411	40.308	29.331	.6902	17.39	-2.08	-35.250	.1187
11	8.0905	823.03	259.52	863.25	730.342	669.438	40.036	29.376	.6807	17.43	-1.73	-59.318	.1182
12	8.1345	815.12	256.40	854.50	733.547	673.395	39.767	29.405	.6719	17.46	-1.34	-138.239	.1176
13	8.1797	811.86	255.60	851.17	736.468	676.796	39.644	29.422	.6676	17.48	-.92	7342.532	.1171
14	8.2231	806.22	254.13	845.34	739.842	680.999	39.436	29.433	.6610	17.50	-.52	208.661	.1164
15	8.2737	800.01	252.97	839.63	743.311	685.276	39.230	29.441	.6545	17.53	-.12	143.654	.1157
16	8.3224	802.32	254.64	841.76	749.441	691.135	39.202	29.448	.6534	17.61	.23	146.570	.1148
17	8.3719	807.39	259.56	848.26	750.043	700.874	39.226	29.454	.6540	17.75	.53	289.603	.1132
18	8.4223	812.95	263.93	854.72	771.402	711.375	39.233	29.457	.6542	17.99	.76	504.288	.1115
19	8.4735	815.05	269.39	858.57	777.946	717.407	39.228	29.449	.6544	18.32	.93	1799.100	.1106
20	8.5259	817.16	277.11	862.87	785.621	724.508	39.181	29.412	.6545	18.73	.99	344.555	.1093
21	8.5795	818.67	285.55	867.04	797.496	735.846	39.004	29.326	.6527	19.23	.88	76.314	.1073

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.585	1.351	.1532	0.0	.8189	1017.98	42.653	728.317	2.902	.404	.8767	.8935
2	16.199	-3.947	17.550	1.361	.1511	0.0	.8035	1000.39	42.525	728.268	2.894	.404	.8740	.8916
3	16.166	-3.421	17.541	1.375	.1493	0.0	.7889	984.75	42.391	728.219	2.885	.404	.8712	.8887
4	16.154	-7.826	17.548	1.395	.1493	0.0	.7750	969.20	42.239	728.169	2.874	.404	.8680	.8859
5	16.136	-7.151	17.557	1.421	.1510	0.0	.7617	954.27	42.064	728.118	2.862	.404	.8643	.8826
6	16.087	-5.330	17.540	1.454	.1574	0.0	.7466	937.20	41.768	728.066	2.842	.404	.8578	.8768
7	16.0[illegible]	-5.513	17.469	1.490	.1648	0.0	.7312	919.68	41.414	727.996	2.818	.404	.8500	.8699
8	15.995	-4.578	17.421	1.527	.1719	0.0	.7152	901.31	40.993	727.891	2.789	.403	.8408	.8617
9	15.918	-3.613	17.381	1.563	.1732	0.0	.7008	884.71	40.598	727.785	2.763	.403	.8320	.8539
10	15.792	-2.607	17.389	1.596	.1809	0.0	.6902	872.64	40.308	728.170	2.743	.404	.8237	.8466
11	15.800	-1.789	17.426	1.625	.1843	0.0	.6807	863.25	40.036	730.342	2.724	.409	.8070	.8319
12	15.812	-1.029	17.461	1.650	.1877	0.0	.6719	854.50	39.767	733.547	2.706	.414	.7907	.8174
13	15.814	-.431	17.481	1.667	.1821	0.0	.6676	851.17	39.644	736.468	2.698	.420	.7772	.8056
14	15.824	.205	17.499	1.676	.1733	0.0	.6610	845.34	39.436	739.842	2.683	.426	.7606	.7909
15	15.861	.931	17.535	1.674	.1636	0.0	.6545	839.63	39.230	743.311	2.669	.433	.7443	.7764
16	15.944	1.837	17.608	1.665	.1476	0.0	.6534	841.76	39.202	749.441	2.668	.445	.7238	.7584
17	16.095	2.884	17.748	1.653	.1324	0.0	.6540	848.26	39.226	750.043	2.669	.465	.6922	.7308
18	16.342	4.044	17.996	1.644	.1167	0.0	.6542	854.72	39.233	771.402	2.670	.487	.6611	.7034
19	16.680	5.345	18.321	1.640	.1091	0.0	.6544	858.57	39.228	777.946	2.669	.500	.6441	.6886
20	17.081	6.841	18.733	1.652	.1026	0.0	.6545	862.87	39.181	785.621	2.666	.515	.6246	.6713
21	17.510	3.542	19.229	1.719	.0982	0.0	.6527	867.04	39.004	797.496	2.654	.538	.5946	.6447

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.743 ISEN. EFF.= .765 POLY. EFF.= .795 DELTA T ON T = .435

STATION 14 FLOW FIELD DESCRIPTION

[illegible]	RADIUS	VELOCITY AXIAL	VELOCITY TANG	VELOCITY TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.67	[illegible]	53.13	527.02	728.317	671.876	40.723	30.642	.6515	6.13	-4.29	15.241	.1228
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	728.268	672.259	40.5[illegible]1	30.585	.6453	6.08	-4.11	15.070	.1225
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	726.219	672.543	40.337	30.522	.6451	5.98	-3.91	15.864	.1222
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72[illegible].169	673.051	41.202	30.454	.6432	5.89	-3.66	15.676	.1219
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	728.118	673.433	41.033	30.392	.6431	5.81	-3.43	15.445	.1215
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	728.066	674.739	39.[illegible]	30.307	.6313	5.75	-3.16	15.260	.1210
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	727.995	675.221	39.21[illegible]	30.224	.6223	5.69	-2.84	15.237	.1204
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	727.891	677.922	39.751	30.152	.6163	5.64	-2.49	15.492	.1198
[illegible]	[illegible]	[illegible]	73.01	[illegible]	727.705	679.495	39.322	30.077	.6333	5.59	-2.10	15.104	.1192
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	728.170	680.332	39.04[illegible]	30.010	.5928	5.56	-1.68	17.114	.1187
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	733.542	[illegible].360	37.771	29.952	.5850	5.53	-1.26	18.554	.1179
[illegible]	[illegible]	[illegible]	71.43	[illegible]	733.547	684.002	37.963	29.909	.5736	5.51	-.81	20.674	.1171
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	736.4[illegible]	[illegible].523	37.4[illegible]	29.442	.5733	5.50	-.38	23.635	.1165
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	739.342	[illegible].390	37.445	29.874	.57[illegible]	5.49	.11	27.699	.1160
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	743.311	697.527	37.4[illegible]	29.395	.57[illegible]	[illegible]	.35	33.909	.1154
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	749.441	712.522	[illegible]	29.316	[illegible]	5.51	.62	43.021	.1147
[illegible]	[illegible]	[illegible]	[illegible]	772.25	750.043	711.599	37.50[illegible]	29.306	.5871	5.56	.83	57.494	.1134
[illegible]	[illegible]	[illegible]	[illegible]	773.34	771.402	721.543	[illegible]	30.016	.5915	5.64	.97	73.131	.1120
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	777.345	727.740	[illegible]	30.081	.5919	5.77	1.05	123.757	.1113
[illegible]	[illegible]	780.45	71.77	784.75	785.621	735.093	33.150	30.132	.5913	5.98	1.09	247.717	.1105
[illegible]	4.9433	[illegible]	[illegible]	7[illegible]	787.490	746.790	33.109	30.229	.5973	5.33	1.06	-619.607	.1090

BLADE DATA

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	.2247	0.0	[illegible]	527.62	40.725	728.317	2.771	.404	.8329	.8548
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5438	524.40	40.501	728.268	2.760	.404	.8292	.8515
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5401	521.27	40.337	726.219	2.748	.404	.8254	.8461
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5432	517.09	40.202	72[illegible].169	2.730	.404	.8213	.8444
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5401	514.14	40.003	728.118	2.722	.404	.8168	.8404
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.53[illegible]	728.066	2.697	.404	.8064	.8328
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.216	727.995	2.669	.404	.7987	.8241
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible].80	38.7[illegible]1	727.891	2.637	.403	.7880	.8145
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5333	[illegible]	38.3[illegible]	727.705	2.608	.403	.7781	.8055
[illegible]	[illegible]	[illegible]	[illegible]	.2723	0.0	.5925	[illegible]	38.043	728.170	2.589	.404	.7699	.7981
[illegible]	[illegible]	[illegible]	[illegible]	.2730	0.0	.5860	751.24	37.771	730.342	2.570	.409	.7536	.7835
[illegible]	[illegible]	[illegible]	[illegible]	.2417	0.0	.5785	743.71	37.593	733.547	2.552	.414	.7377	.7693
[illegible]	[illegible]	[illegible]	[illegible]	.2733	0.0	.5795	749.23	37.494	736.4[illegible]	2.551	.420	.7275	.7603
[illegible]	[illegible]	[illegible]	[illegible]	.2547	0.0	.5702	[illegible]	37.443	739.342	2.546	.420	.7152	.7495
[illegible]	[illegible]	[illegible]	[illegible]	.2491	0.0	.5732	743.06	37.47[illegible]	743.311	2.545	.433	.7032	.7388
[illegible]	[illegible]	[illegible]	[illegible]	.2214	0.0	.5816	752.24	37.334	749.441	2.553	.445	.6886	.7261
[illegible]	[illegible]	[illegible]	.601	.1343	0.0	.5871	767.25	37.407	750.043	2.573	.459	.6626	.7034
[illegible]	[illegible]	[illegible]	[illegible]	.1751	0.0	.5915	773.34	38.004	771.402	2.58[illegible]	.487	.6306	.6806
[illegible]	[illegible]	[illegible]	[illegible]	.1659	0.0	.5919	782.02	38.095	777.345	2.592	.500	.6222	.6680
[illegible]	[illegible]	[illegible]	[illegible]	.1562	0.0	.5910	784.75	38.100	785.521	2.597	.515	.6054	.6532
[illegible]	[illegible]	34.473	2.513	.1455	0.0	.5976	785.35	38.133	787.490	2.597	.538	.5794	.6302

STATION 14 THE STATION PERFORMANCE PRESSURE RATIO = 2.618 ISEN. EFF. = .725 POLY. EFF. = .759 DELTA T ON T = .435

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6430	949.19	0.00	949.19	728.317	654.038	38.809	26.559	.7571	0.00	-1.66	10.624	.1094
2	7.6770	945.84	0.00	945.84	728.268	654.513	38.598	26.489	.7542	0.00	-1.59	11.179	.1090
3	7.7161	942.15	0.00	942.15	728.219	655.040	38.382	26.422	.7509	0.00	-1.50	11.881	.1086
4	7.7557	938.05	0.00	938.05	728.169	655.626	38.160	26.358	.7473	0.00	-1.40	12.768	.1083
5	7.7953	933.51	0.00	933.51	728.118	656.277	37.932	26.299	.7434	0.00	-1.29	13.984	.1079
6	7.8351	921.64	0.00	921.64	728.066	658.044	37.458	26.244	.7329	0.00	-1.17	15.624	.1074
7	7.8815	907.61	0.00	907.61	727.996	660.094	36.999	26.196	.7207	0.00	-1.02	17.998	.1069
8	7.9265	892.05	0.00	892.05	727.891	662.302	36.491	26.156	.7071	0.00	-.86	21.604	.1064
9	7.9732	877.41	0.00	877.41	727.785	664.334	36.036	26.123	.6945	0.00	-.69	27.523	.1059
10	8.0213	869.54	0.00	869.54	728.170	665.856	35.779	26.098	.6875	0.00	-.51	39.536	.1056
11	8.0709	862.16	0.00	862.16	730.842	669.594	35.516	26.081	.6798	0.00	-.32	63.715	.1049
12	8.1218	854.13	0.00	854.13	733.547	673.447	35.252	26.073	.6715	0.00	-.13	230.214	.1043
13	8.1736	859.57	0.00	859.57	736.468	675.611	35.351	26.074	.6748	0.00	.06	-163.300	.1040
14	8.2263	864.36	0.00	864.36	739.842	678.244	35.450	26.083	.6776	0.00	.22	-65.363	.1036
15	8.2792	869.87	0.00	869.87	743.311	681.012	35.550	26.099	.6802	0.00	.36	-44.057	.1032
16	8.3324	886.83	0.00	886.83	749.441	684.710	35.938	26.122	.6916	0.00	.46	-35.527	.1028
17	8.3855	906.07	0.00	906.07	760.043	692.516	36.328	26.149	.7027	0.00	.54	-31.482	.1017
18	8.4337	925.37	0.00	925.37	771.402	701.017	36.719	26.179	.7133	0.00	.58	-29.735	.1006
19	8.4920	934.79	0.00	934.79	777.946	706.151	36.920	26.211	.7180	0.00	.59	-29.473	.1000
20	8.5450	944.74	0.00	944.74	785.621	712.329	37.117	26.243	.7226	0.00	.57	-30.590	.0992
21	8.6000	957.30	0.00	957.30	797.496	722.305	37.316	26.274	.7272	0.00	.52	-33.905	.0980

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3040	0.0	.7571	949.19	38.809	728.317	2.641	.404	.7878	.8143
2	-7.387	.020	0.000	7.387	.3037	0.0	.7542	945.84	38.598	728.268	2.626	.404	.7829	.8099
3	-7.545	.019	0.000	7.545	.3044	0.0	.7509	942.15	38.382	728.219	2.612	.404	.7779	.8054
4	-7.707	.018	0.000	7.707	.3065	0.0	.7473	938.05	38.160	728.169	2.597	.404	.7727	.8007
5	-7.871	.016	0.000	7.871	.3098	0.0	.7434	933.51	37.932	728.118	2.581	.404	.7674	.7958
6	-8.034	.014	0.000	8.034	.3222	0.0	.7329	921.64	37.458	728.066	2.551	.404	.7567	.7861
7	-8.198	.012	0.000	8.198	.3359	0.0	.7207	907.61	36.999	727.996	2.518	.404	.7449	.7753
8	-8.360	.010	0.000	8.360	.3485	0.0	.7071	892.05	36.491	727.891	2.483	.403	.7326	.7640
9	-8.517	.008	0.000	8.517	.3597	0.0	.6945	877.41	36.036	727.785	2.452	.403	.7215	.7538
10	-8.662	.007	0.000	8.662	.3637	0.0	.6875	869.54	35.779	728.170	2.435	.404	.7137	.7466
11	-8.790	.005	0.000	8.790	.3693	0.0	.6798	862.16	35.516	730.842	2.417	.409	.6980	.7324
12	-8.900	.003	0.000	8.900	.3751	0.0	.6715	854.13	35.252	733.547	2.399	.414	.6826	.7185
13	-8.987	.001	0.000	8.987	.3636	0.0	.6748	859.57	35.351	736.468	2.405	.420	.6758	.7125
14	-9.043	-.001	0.000	9.043	.3464	0.0	.6776	864.86	35.450	739.842	2.412	.426	.6679	.7056
15	-9.062	-.004	0.000	9.062	.3280	0.0	.6802	869.87	35.550	743.311	2.419	.433	.6599	.6986
16	-9.058	-.008	0.000	9.058	.2974	0.0	.6916	886.83	35.938	749.441	2.445	.445	.6512	.6912
17	-9.060	-.012	0.000	9.060	.2689	0.0	.7027	906.07	36.328	760.043	2.472	.465	.6309	.6737
18	-9.086	-.018	0.000	9.086	.2389	0.0	.7133	925.37	36.719	771.402	2.499	.487	.6184	.6560
19	-9.127	-.024	0.000	9.127	.2248	0.0	.7180	934.79	36.920	777.946	2.512	.500	.5989	.6460
20	-9.170	-.031	0.000	9.170	.2109	0.0	.7226	944.74	37.117	785.621	2.526	.515	.5854	.6343
21	-9.213	-.038	0.000	9.213	.1949	0.0	.7272	957.30	37.316	797.496	2.539	.538	.5639	.6155

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.492 ISEN. EFF.= .682 POLY. EFF.= .720 DELTA T ON T = .435

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6430	961.40	0.00	961.40	728.317	652.111	38.803	26.285	.7580	0.00	0.00	0.000	.1086
2	7.6772	955.01	0.00	955.01	728.268	653.073	38.533	26.285	.7623	0.00	-.01	2418.948	.1084
3	7.7155	948.37	0.00	948.37	728.219	654.068	38.382	26.284	.7554	0.00	-.03	1300.941	.1082
4	7.7549	941.46	0.00	941.45	728.169	655.097	38.160	26.284	.7503	0.00	-.04	941.358	.1081
5	7.7955	934.26	0.00	934.26	728.118	656.167	37.932	26.283	.7440	0.00	-.04	774.377	.1079
6	7.8370	919.91	0.00	919.91	728.066	658.308	37.433	26.281	.7314	0.00	-.05	697.666	.1075
7	7.8803	903.60	0.00	903.60	727.996	660.694	36.993	26.280	.7172	0.00	-.05	646.801	.1071
8	7.9253	886.32	0.00	886.02	727.891	663.188	36.491	26.279	.7019	0.00	-.05	640.817	.1067
9	7.9720	869.66	0.00	864.66	727.785	665.452	36.035	26.278	.6878	0.00	-.05	669.620	.1064
10	8.0203	860.49	0.00	860.49	729.170	667.149	35.773	26.276	.6797	0.00	-.05	740.399	.1061
11	8.0700	852.17	0.00	852.17	730.842	671.007	35.515	25.275	.6712	0.00	-.04	873.854	.1055
12	8.1211	843.63	0.00	843.63	733.547	674.918	35.252	26.275	.6626	0.00	-.03	1129.839	.1049
13	8.1733	849.17	0.00	849.17	736.468	677.076	35.351	26.274	.6659	0.00	-.02	1652.451	.1045
14	8.2260	854.99	0.00	854.99	739.842	679.645	35.451	26.274	.6692	0.00	-.01	2937.869	.1041
15	8.2792	860.87	0.00	860.87	743.311	682.297	35.550	26.273	.6725	0.00	-.00	9339.534	.1037
16	8.3325	879.10	0.00	879.10	749.441	685.836	35.933	26.273	.6850	0.00	.00	-13958.021	.1032
17	8.3857	899.78	0.00	899.78	760.045	693.452	36.329	26.273	.6973	0.00	.01	-5511.283	.1021
18	8.4395	920.64	0.00	920.64	77[illegible].402	701.736	36.719	26.274	.7093	0.00	.01	-4472.826	.1008
19	8.4922	931.67	0.00	931.67	777.946	706.631	36.920	26.274	.7154	0.00	.01	-4900.048	.1002
20	8.5459	943.21	0.00	943.21	785.621	712.565	37.117	26.274	.7213	0.00	.00	-7801.394	.0993
21	8.6000	957.30	0.00	957.30	797.496	722.305	37.315	26.274	.7272	0.00	0.00	0.000	.0980

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	961.88	0.00	961.98	728.317	652.034	38.803	26.274	.7684	0.00	0.00	0.000	.1085
2	7.6772	955.49	0.00	955.49	728.262	652.998	38.593	26.274	.7627	0.00	-.00	0.000	.1064
3	7.7155	948.33	0.00	948.33	728.219	653.996	38.382	26.274	.7569	0.00	-.00	0.000	.1082
4	7.7548	941.89	0.00	941.89	728.169	655.030	38.160	26.274	.7507	0.00	-.00	0.000	.1080
5	7.7953	934.65	0.00	934.65	728.118	656.102	37.932	26.274	.7444	0.00	-.00	0.000	.1079
6	7.8370	920.26	0.00	920.26	728.066	658.255	37.499	26.274	.7317	0.00	-.00	0.000	.1075
7	7.8803	903.90	0.00	903.90	727.996	660.650	36.934	26.274	.7174	0.00	-.00	0.000	.1071
8	7.9252	886.25	0.00	886.25	727.891	663.153	36.491	26.274	.7021	0.00	-.00	0.000	.1067
9	7.9720	869.84	0.00	869.84	727.785	665.427	36.035	26.274	.6879	0.00	-.00	0.000	.1064
10	8.0203	860.61	0.00	860.61	728.170	667.132	35.773	26.274	.6798	0.00	-.00	0.000	.1061
11	8.0699	852.24	0.00	852.24	730.842	670.397	35.515	26.274	.6713	0.00	-.00	0.000	.1055
12	8.1211	843.65	0.00	843.65	733.547	674.915	35.252	26.274	.6626	0.00	-.00	0.000	.1049
13	8.1733	849.17	0.00	849.17	736.468	677.077	35.351	26.274	.6659	0.00	-.00	0.000	.1045
14	8.2260	854.96	0.00	854.96	739.842	679.649	35.450	26.274	.6692	0.00	-.00	0.000	.1041
15	8.2741	860.83	0.00	860.83	743.311	682.302	35.550	26.274	.6725	0.00	-.00	0.000	.1037
16	8.3324	879.06	0.00	879.06	749.441	685.842	35.933	26.274	.6850	0.00	-.00	0.000	.1032
17	8.3856	899.75	0.00	899.75	760.043	693.457	36.329	26.274	.6973	0.00	-.00	0.000	.1021
18	8.4339	920.52	0.00	920.62	771.402	701.740	36.719	26.274	.7093	0.00	-.00	0.000	.1009
19	8.4922	931.66	0.00	931.66	777.946	706.633	36.920	26.274	.7154	0.00	-.00	0.000	.1002
20	8.5433	943.21	0.00	943.21	785.621	712.566	37.117	26.274	.7213	0.00	-.00	0.000	.0993
21	8.6000	957.30	0.00	957.30	797.496	722.305	37.315	26.274	.7272	0.00	0.00	0.000	.0980

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	1.1127	7.900	5.317	.0832	.4124	.4231	.5323	.7531	.7773	-60.937	-12.647	6.070	10.991
2	6.8616	7.5360	1.1303	7.638	5.580	.0862	.4335	.4430	.5335	.7329	.7698	-61.342	-13.336	6.231	10.695
3	6.9723	7.6230	1.1477	7.405	5.830	.0890	.4511	.4595	.5308	.7100	.7621	-61.722	-14.039	6.367	10.316
4	7.0824	7.6610	1.1650	7.212	5.934	.0915	.4658	.4732	.5251	.7019	.7544	-62.068	-14.738	6.420	9.775
5	7.1918	7.6998	1.1820	7.055	6.144	.0940	.4782	.4844	.5170	.6901	.7456	-62.373	-15.451	6.324	9.077
6	7.3007	7.7396	1.1993	6.954	6.242	.0963	.4884	.4937	.5070	.6803	.7388	-62.650	-16.186	6.044	8.312
7	7.4093	7.7802	1.2155	6.867	6.350	.1002	.4975	.5019	.4955	.6714	.7309	-62.917	-16.916	5.577	7.649
8	7.5176	7.8219	1.2319	6.736	6.543	.1073	.5067	.5102	.4830	.6623	.7227	-63.183	-17.615	4.927	7.144
9	7.6257	7.8645	1.2451	6.739	6.709	.1142	.5143	.5170	.4695	.6547	.7145	-63.454	-18.261	4.092	6.793
10	7.7340	7.9083	1.2640	6.694	6.950	.1241	.5225	.5246	.4553	.6465	.7080	-63.736	-18.849	3.091	6.647
11	7.8426	7.9535	1.2795	6.658	6.915	.1436	.5400	.5412	.4405	.6311	.7089	-64.034	-19.382	1.962	6.745
12	7.9517	8.0004	1.2950	6.629	6.745	.1718	.5560	.5566	.4255	.6165	.7036	-64.352	-19.870	.742	7.086
13	8.0615	8.0493	1.3102	6.606	6.737	.1974	.5735	.5734	.4104	.6005	.7106	-64.693	-20.312	-.586	7.678
14	8.1723	8.1007	1.3252	6.599	7.077	.2296	.5956	.5949	.3953	.5600	.7126	-65.061	-20.714	-2.054	8.526
15	8.2844	8.1551	1.3400	6.577	7.535	.2603	.6175	.6162	.3805	.5594	.7142	-65.460	-21.081	-3.641	9.588
16	8.3981	8.2135	1.3545	6.571	7.790	.3017	.6505	.6489	.3663	.5283	.7234	-65.890	-21.403	-5.170	10.780
17	8.5137	8.2791	1.3692	6.572	7.925	.3596	.7058	.7033	.3532	.4794	.7451	-66.347	-21.685	-6.335	12.021
18	8.6315	8.3526	1.3833	6.534	9.006	.4155	.7688	.7558	.3422	.4215	.7666	-66.822	-21.897	-7.045	13.167
19	8.7517	8.4383	1.3987	6.600	11.082	.4418	.8013	.7960	.3334	.3895	.7707	-67.307	-21.957	-7.696	13.893
20	8.8740	8.5372	1.4141	6.599	15.012	.4721	.8436	.8400	.3258	.3479	.7754	-67.803	-21.736	-8.547	13.836
21	9.0000	8.6699	1.4303	6.533	26.999	.5212	.9261	.9227	.3250	.2657	.7856	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.5400	1.1277	-1.320	7.239	.3040	.4417	.4415	.2154	.7116	0.0000	48.817	-7.239	-39.941	.020
2	7.6667	7.6776	1.1401	-1.400	7.397	.3037	.4546	.4545	.2258	.7030	0.0000	47.971	-7.397	-37.356	.020
3	7.7123	7.7161	1.1503	-1.346	7.545	.3044	.4666	.4560	.2342	.6953	0.0000	47.127	-7.545	-34.538	.019
4	7.7574	7.7557	1.1571	-1.329	7.707	.3065	.4772	.4772	.2400	.6891	0.0000	46.489	-7.707	-31.568	.018
5	7.8007	7.7953	1.1605	-1.305	7.871	.3098	.4863	.4864	.2434	.6842	0.0000	46.001	-7.871	-28.504	.016
6	7.8430	7.8381	1.1611	-1.271	8.034	.3222	.4992	.4993	.2448	.6753	0.0000	45.629	-8.034	-25.395	.014
7	7.8846	7.8815	1.1565	-1.170	8.198	.3359	.5122	.5123	.2453	.6661	0.0000	45.311	-8.198	-22.295	.012
8	7.9260	7.9265	1.1527	-.958	8.360	.3465	.5248	.5248	.2459	.6574	0.0000	45.041	-8.360	-19.248	.010
9	7.9672	7.9732	1.1454	-.590	8.517	.3597	.5358	.5356	.2459	.6499	0.0000	44.818	-8.517	-16.171	.008
10	8.0084	8.0213	1.1375	-.522	8.662	.3637	.5418	.5416	.2454	.6475	0.0000	44.649	-8.662	-12.903	.007
11	8.0498	8.0709	1.1297	.216	8.730	.3693	.5496	.5494	.2445	.6444	0.0000	44.542	-8.730	-9.292	.005
12	8.0919	8.1215	1.1215	.598	8.900	.3751	.5573	.5569	.2433	.6409	0.0000	44.520	-8.900	-5.456	.003
13	8.1345	8.1733	1.1115	1.592	8.987	.3636	.5538	.5533	.2443	.6443	0.0000	44.621	-8.987	-1.711	.001
14	8.1781	8.2263	1.0979	2.425	9.043	.3464	.5488	.5482	.2469	.6573	0.0000	44.874	-9.043	1.683	-.001
15	8.2230	8.2792	1.0835	3.242	9.062	.3290	.5429	.5422	.2493	.6667	0.0000	45.230	-9.062	5.109	-.004
16	8.2696	8.3324	1.0695	4.735	9.058	.2974	.5301	.5293	.2520	.6841	0.0000	45.604	-9.058	9.413	-.008
17	8.3193	8.3857	1.0525	7.533	9.060	.2689	.5196	.5187	.2519	.7015	0.0000	45.945	-9.060	15.494	-.012
18	8.3742	8.4387	1.0374	10.680	9.086	.2339	.5060	.5051	.2489	.7214	0.0000	46.471	-9.086	23.204	-.018
19	8.4357	8.4920	1.0172	12.751	9.127	.2248	.4902	.4894	.2385	.7377	0.0000	47.494	-9.127	31.497	-.024
20	8.5079	8.5458	.9972	15.813	9.170	.2109	.4665	.4560	.2187	.7607	0.0000	48.941	-9.170	39.406	-.031
21	8.6199	8.5000	.9325	25.523	9.213	.1949	.4224	.4227	.1729	.8029	0.0000	50.614	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	24.3	25.6	25.6
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	24.3	25.6	25.6

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 301230515695

FLOW = 23.74 SPEED = 19378.7 PRESSURE RATIO = 2.492 ISENTROPIC EFFY = .6825 POLYTROPIC EFFY = .7195 DEL T/T = .4347

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	ROTOR ISEN EFFY	----STAGE---- PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301230515695	CONVERGED AFTER 25 PASSES	23.742	19378.7	2.986	.841	2.492	.682	.62207

9. TEST POINT 301231615700 (100%)

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PASS  2 STATION  1 STREAMLINE 21 ITERATION  2 VM/VM(MID)= 3.114 VM(MID)= .9048E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION  2 VM/VM(MID)=******* VM(MID)= .5860E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION  3 VM/VM(MID)=******* VM(MID)= .6294E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION  4 VM/VM(MID)=******* VM(MID)= .8181E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION  7 VM/VM(MID)=******* VM(MID)= .8550E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION  8 VM/VM(MID)=******* VM(MID)= .8233E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 11 VM/VM(MID)=******* VM(MID)= .8543E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 12 VM/VM(MID)=******* VM(MID)= .8234E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 15 VM/VM(MID)=******* VM(MID)= .8341E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 16 VM/VM(MID)=******* VM(MID)= .8235E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 19 VM/VM(MID)=******* VM(MID)= .8534E+03
PASS  2 STATION 10 STREAMLINE 21 ITERATION 20 VM/VM(MID)=******* VM(MID)= .8235E+03
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STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0555	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	20.93	0.000	.0724
2	6.2251	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	19.72	0.000	.0724
3	6.3657	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	18.50	0.000	.0724
4	6.5393	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	17.27	0.000	.0724
5	6.6935	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	16.03	0.000	.0724
6	6.8473	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	14.78	0.000	.0724
7	6.9999	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	13.54	0.000	.0724
8	7.1515	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	12.31	0.000	.0724
9	7.3027	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	11.09	0.000	.0724
10	7.4532	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	9.89	0.000	.0724
11	7.6031	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	8.71	0.000	.0724
12	7.7525	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	7.56	0.000	.0724
13	7.9016	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	6.45	0.000	.0724
14	8.0497	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	5.39	0.000	.0724
15	8.1974	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	4.38	0.000	.0724
16	8.3471	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	3.43	0.000	.0724
17	8.4954	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	2.55	0.000	.0724
18	8.6443	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	1.76	0.000	.0724
19	8.7932	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	1.06	0.000	.0724
20	8.9415	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	.47	0.000	.0724
21	9.0900	350.55	0.00	350.55	518.688	507.890	14.695	13.553	.3260	0.00	0.00	0.000	.0724

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3741	394.83	0.00	394.83	518.688	505.790	14.695	13.456	.3573	0.00	20.63	-205.738	.0717
2	6.5131	396.27	0.00	396.27	518.688	505.644	14.695	13.443	.3591	0.00	19.54	-115.058	.0716
3	6.6514	398.23	0.00	398.23	518.688	505.515	14.695	13.431	.3609	0.00	18.25	-83.238	.0716
4	6.7880	399.94	0.00	399.94	518.688	505.401	14.695	13.420	.3625	0.00	16.95	-65.324	.0715
5	6.9235	401.39	0.00	401.39	518.688	505.305	14.695	13.411	.3638	0.00	15.66	-56.744	.0715
6	7.0584	402.58	0.00	402.58	518.688	505.226	14.695	13.404	.3649	0.00	14.37	-48.621	.0715
7	7.1925	403.49	0.00	403.49	518.688	505.165	14.695	13.399	.3658	0.00	13.08	-44.137	.0714
8	7.3262	404.11	0.00	404.11	518.688	505.123	14.695	13.394	.3664	0.00	11.80	-39.796	.0714
9	7.4595	404.42	0.00	404.42	518.688	505.102	14.695	13.393	.3667	0.00	10.52	-35.053	.0714
10	7.5923	404.40	0.00	404.40	518.688	505.103	14.695	13.393	.3666	0.00	9.27	-32.760	.0714
11	7.7236	404.04	0.00	404.04	518.688	505.128	14.695	13.395	.3663	0.00	8.03	-29.797	.0714
12	7.8545	403.31	0.00	403.31	518.688	505.177	14.695	13.399	.3656	0.00	6.82	-27.035	.0714
13	7.9822	402.19	0.00	402.19	518.688	505.252	14.695	13.406	.3645	0.00	5.63	-24.611	.0715
14	8.1251	400.56	0.00	400.65	518.688	505.353	14.695	13.416	.3632	0.00	4.49	-22.322	.0715
15	8.2535	398.71	0.00	398.71	518.688	505.483	14.695	13.428	.3613	0.00	3.38	-20.212	.0715
16	8.3799	396.32	0.00	396.32	518.688	505.641	14.695	13.443	.3591	0.00	2.33	-18.270	.0715
17	8.5321	393.47	0.00	393.47	518.688	505.828	14.695	13.460	.3565	0.00	1.34	-16.480	.0717
18	8.6834	390.14	0.00	390.14	518.688	506.045	14.695	13.480	.3534	0.00	.41	-14.827	.0717
19	8.8030	386.30	0.00	386.30	518.688	506.292	14.695	13.503	.3499	0.00	-.44	-13.292	.0718
20	8.9432	381.32	0.00	381.32	518.688	506.572	14.695	13.529	.3458	0.00	-1.22	-11.859	.0719
21	9.0800	375.94	0.00	375.94	518.688	506.886	14.695	13.559	.3411	0.00	-1.91	-10.518	.0720

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6015	436.33	0.00	436.33	518.688	502.873	14.695	13.187	.3955	0.00	20.54	-83.031	.0706
2	6.7244	439.45	0.00	439.45	518.688	502.646	14.695	13.166	.3994	0.00	19.16	-77.518	.0706
3	6.8453	442.35	0.00	442.35	518.688	502.433	14.695	13.147	.4021	0.00	17.78	-70.169	.0705
4	6.9673	445.00	0.00	445.00	518.688	502.235	14.695	13.129	.4045	0.00	16.40	-62.492	.0704
5	7.0877	447.34	0.00	447.34	518.688	502.065	14.695	13.113	.4063	0.00	15.02	-54.949	.0703
6	7.2074	449.34	0.00	449.34	518.688	501.915	14.695	13.099	.4087	0.00	13.64	-47.813	.0703
7	7.3255	450.96	0.00	450.95	518.688	501.795	14.695	13.088	.4102	0.00	12.26	-41.344	.0703
8	7.4433	452.13	0.00	452.13	518.688	501.707	14.695	13.080	.4113	0.00	10.67	-35.660	.0702
9	7.5643	452.80	0.00	452.80	518.688	501.656	14.695	13.076	.4119	0.00	9.49	-30.771	.0702
10	7.6833	452.93	0.00	452.93	518.688	501.646	14.695	13.075	.4121	0.00	8.10	-26.627	.0702
11	7.8030	452.48	0.00	452.45	518.688	501.681	14.695	13.078	.4115	0.00	6.73	-23.152	.0702
12	7.9225	451.38	0.00	451.33	518.688	501.763	14.695	13.085	.4100	0.00	5.36	-20.244	.0702
13	8.0429	449.61	0.00	449.61	518.688	501.895	14.695	13.097	.4083	0.00	4.01	-17.810	.0703
14	8.1637	447.15	0.00	447.15	518.688	502.079	14.695	13.114	.4056	0.00	2.66	-15.773	.0704
15	8.2856	443.95	0.00	443.95	518.688	502.316	14.695	13.136	.4025	0.00	1.37	-14.075	.0704
16	8.4068	440.03	0.00	440.03	518.688	502.604	14.695	13.162	.3989	0.00	.10	-12.675	.0705
17	8.5333	435.39	0.00	435.39	518.688	502.941	14.695	13.193	.3955	0.00	-1.12	-11.543	.0707
18	8.6575	430.08	0.00	430.08	518.688	503.323	14.695	13.228	.3905	0.00	-2.29	-10.637	.0708
19	8.7875	424.15	0.00	424.15	518.688	503.743	14.695	13.267	.3851	0.00	-3.40	-9.913	.0709
20	8.9177	417.67	0.00	417.67	518.688	504.197	14.695	13.309	.3793	0.00	-4.46	-9.306	.0711
21	9.0533	410.52	0.00	410.62	518.688	504.683	14.695	13.354	.3724	0.00	-5.47	-8.690	.0713

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	483.57	0.00	483.57	518.688	499.254	14.695	12.858	.4411	0.00	20.32	-388.054	.0694
2	6.8919	488.11	0.00	488.11	518.688	498.896	14.695	12.826	.4463	0.00	18.94	-428.475	.0692
3	6.9729	492.25	0.00	492.25	518.688	498.559	14.695	12.795	.4492	0.00	17.54	-568.757	.0691
4	7.0873	496.10	0.00	496.10	518.688	498.242	14.695	12.767	.4529	0.00	16.14	-601.052	.0690
5	7.1930	499.34	0.00	499.34	518.688	497.949	14.695	12.741	.4562	0.00	14.72	-378.504	.0689
6	7.3022	502.79	0.00	502.79	518.688	497.667	14.695	12.717	.4592	0.00	13.27	-197.826	.0688
7	7.4111	505.45	0.00	505.45	518.688	497.404	14.695	12.697	.4617	0.00	11.80	-111.646	.0687
8	7.5197	507.53	0.00	507.53	518.688	497.290	14.695	12.682	.4637	0.00	10.30	-70.977	.0687
9	7.6213	508.93	0.00	508.93	518.688	497.171	14.695	12.671	.4651	0.00	8.78	-48.151	.0686
10	7.7335	509.58	0.00	509.58	518.688	497.116	14.695	12.665	.4657	0.00	7.24	-34.070	.0686
11	7.8455	509.42	0.00	509.42	518.688	497.129	14.695	12.667	.4655	0.00	5.69	-27.950	.0686
12	7.9551	508.40	0.00	508.40	518.688	497.216	14.695	12.675	.4646	0.00	4.14	-22.442	.0687
13	8.0651	506.45	0.00	506.45	518.688	497.379	14.695	12.690	.4627	0.00	2.57	-18.258	.0687
14	8.1750	503.50	0.00	503.50	518.688	497.628	14.695	12.712	.4599	0.00	1.00	-14.964	.0688
15	8.2851	499.40	0.00	499.40	518.688	497.969	14.695	12.742	.4559	0.00	-.57	-12.372	.0689
16	8.4016	494.08	0.00	494.08	518.688	498.409	14.695	12.782	.4509	0.00	-2.13	-10.418	.0691
17	8.5155	487.56	0.00	487.55	518.688	498.941	14.695	12.830	.4447	0.00	-3.63	-9.066	.0693
18	8.6341	480.00	0.00	480.00	518.688	499.548	14.695	12.884	.4376	0.00	-5.04	-8.235	.0695
19	8.7535	471.74	0.00	471.74	518.688	500.201	14.695	12.943	.4299	0.00	-6.32	-7.851	.0697
20	8.8736	463.34	0.00	463.34	518.688	500.854	14.695	13.003	.4219	0.00	-7.43	-8.099	.0699
21	9.0000	455.94	0.00	455.94	518.688	501.419	14.695	13.054	.4143	0.00	-8.25	-10.317	.0701

BLADE DATA

STREAM LINE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	BLADE [illegible]	RELATIVE MACH [illegible]	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T [illegible]	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-.935	.672	[illegible]	.147	0.0000	1212.2	1.1917	1295.59	30.456	630.497	1.000	0.000	1.0000	1.0000
2	-1.341	.232	[illegible]	[illegible]	0.0000	1222.2	1.2005	1315.04	31.130	642.490	1.000	0.000	1.0000	1.0000
3	[illegible]	-.357	[illegible]	[illegible]	0.0000	[illegible]	1.2191	1333.34	31.822	645.519	1.000	0.000	1.0000	1.0000
4	-.207	[illegible]	[illegible]	[illegible]	0.0000	1261.5	1.2375	[illegible]	32.532	650.585	1.000	0.000	1.0000	1.0000
5	[illegible]	-.322	[illegible]	[illegible]	0.0000	1281.1	1.2556	1373.13	33.250	654.592	1.000	0.000	1.0000	1.0000
6	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1300.5	1.2735	1394.41	34.009	655.342	1.000	0.000	1.0000	1.0000
7	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1320.0	1.2912	1413.46	34.775	663.338	1.000	0.000	1.0000	1.0000
8	[illegible]	-.312	[illegible]	[illegible]	0.0000	1339.5	1.3087	1432.25	35.567	667.267	1.000	0.000	1.0000	1.0000
9	-10.423	[illegible]	[illegible]	[illegible]	0.0000	1358.7	1.3255	1453.57	36.332	671.592	1.000	0.000	1.0000	1.0000
10	-13.735	[illegible]	[illegible]	[illegible]	0.0000	1378.0	1.3427	[illegible]	37.222	675.462	1.000	0.000	1.0000	1.0000
11	[illegible]	1.375	-65.471	[illegible]	0.0000	1397.4	1.3597	[illegible]	38.091	680.403	1.000	0.000	1.0000	1.0000
12	[illegible]	[illegible]	-70.261	[illegible]	0.0000	1416.3	1.3755	[illegible]	38.930	684.924	1.000	0.000	1.0000	1.0000
13	[illegible]	-.332	[illegible]	[illegible]	0.0000	[illegible]	1.3916	1523.15	39.923	689.534	1.000	0.000	1.0000	1.0000
14	[illegible]	-2.105	-71.327	[illegible]	0.0000	1455.2	1.4074	[illegible]	40.594	694.245	1.000	0.000	1.0000	1.0000
15	[illegible]	-3.633	-71.359	.354	0.0000	1476.2	1.4229	1558.35	41.305	699.069	1.000	0.000	1.0000	1.0000
16	[illegible]	[illegible]	-71.725	.324	0.0000	1496.4	1.4355	1575.37	42.951	704.020	1.000	0.000	1.0000	1.0000
17	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1515.9	1.4535	1593.37	44.005	709.114	1.000	0.000	1.0000	1.0000
18	[illegible]	-7.039	[illegible]	[illegible]	0.0000	1537.5	1.4686	1611.00	45.231	714.367	1.000	0.000	1.0000	1.0000
19	-17.419	-7.737	-73.100	.847	0.0000	1554.1	1.4842	1625.92	46.457	719.794	1.000	0.000	1.0000	1.0000
20	-7.511	[illegible]	-73.554	[illegible]	0.0000	1580.3	1.4938	1647.35	47.743	725.407	1.000	0.000	1.0000	1.0000
21	-15.310	-9.617	-74.125	[illegible]	0.0000	1593.0	1.5165	[illegible]	49.112	731.207	1.000	0.000	1.0000	1.0000

STATION [illegible] FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.9473	533.57	133.47	[illegible]	[illegible]	520.303	17.473	14.704	.4971	14.19	22.32	6.139	.0764
2	6.9993	542.34	132.54	[illegible]	[illegible]	520.253	17.421	14.704	.4933	13.74	20.06	7.057	.0761
3	7.0342	545.17	129.51	[illegible]	543.354	519.523	17.391	14.674	.5008	13.37	18.96	8.522	.0759
4	7.1493	546.24	127.25	562.32	545.785	519.427	[illegible]	14.515	.5032	13.07	17.20	11.230	.0758
5	7.2573	551.43	125.75	[illegible]	[illegible]	519.271	[illegible]	14.538	.5053	12.95	15.39	17.033	.0757
6	7.3452	554.31	[illegible]	[illegible]	[illegible]	519.158	[illegible]	14.574	.5081	12.69	13.53	77.588	.0756
7	7.4433	555.46	[illegible]	571.13	[illegible]	519.257	[illegible]	14.574	.5033	12.61	11.62	-151.336	.0756
8	7.5912	557.03	[illegible]	[illegible]	[illegible]	[illegible]	17.43	14.591	.5105	12.62	9.66	-24.465	.0755
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14.624	.5111	12.59	7.67	-13.192	.0757
10	[illegible]	[illegible]	127.47	572.03	[illegible]	[illegible]	[illegible]	14.575	.5103	12.87	5.65	-9.052	.0759
11	[illegible]	555.25	131.52	571.03	549.847	522.225	17.601	14.742	.5047	13.30	3.64	-6.976	.0760
12	[illegible]	[illegible]	[illegible]	571.11	550.749	523.723	[illegible]	14.324	.5035	13.79	1.65	-5.805	.0762
13	8.0737	552.44	140.33	573.11	552.332	525.353	17.73	14.320	[illegible]	14.30	-.29	-5.131	.0765
14	8.1727	[illegible]	145.57	[illegible]	555.314	527.054	[illegible]	15.026	[illegible]	14.85	-2.17	-4.772	.0768
15	8.2750	[illegible]	150.02	[illegible]	555.416	525.367	[illegible]	15.130	[illegible]	15.38	-3.98	-4.648	.0771
16	8.3790	533.74	[illegible]	550.50	557.007	530.933	18.033	15.246	.4937	16.02	-5.67	-4.737	.0773
17	[illegible]	523.32	[illegible]	532.44	558.700	533.336	18.063	15.350	.4873	16.77	-7.13	-5.072	.0775
18	[illegible]	517.13	[illegible]	542.10	559.943	535.605	18.033	15.444	.4774	17.46	-8.43	-5.909	.0777
19	8.6333	[illegible]	161.27	527.53	560.173	537.071	17.993	15.519	.4640	17.80	-9.35	-7.429	.0778
20	8.8154	483.26	157.43	503.35	553.515	538.373	[illegible]	15.566	[illegible]	18.05	-9.60	-12.256	.0779
21	[illegible]	450.15	[illegible]	480.34	558.952	539.758	[illegible]	15.571	.4213	18.48	-9.35	-1555.583	.0777

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	[illegible]	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-50.948	4.253	-63.704	4.755	.0171	1228.5	1.0877	1219.18	31.052	543.791	1.189	.054	.9461	.9474
2	-50.445	4.235	-64.340	4.594	.0175	1245.6	1.1069	1235.94	31.565	547.470	1.186	.053	.9428	.9442
3	-49.406	4.072	-64.342	4.435	.0179	1264.4	1.1253	1259.04	32.235	551.176	1.183	.052	.9399	.9413
4	-50.319	3.707	-64.035	4.257	.0153	1282.2	1.1430	1279.44	32.938	554.314	1.182	.052	.9373	.9388
5	-50.502	3.2[illegible]	-65.142	4.163	.0155	1299.8	1.1599	1297.12	33.595	556.574	1.182	.052	.9351	.9366
6	-51.037	2.[illegible]	-65.370	4.053	.0190	1317.3	1.1751	1315.05	34.255	562.459	1.183	.053	.9331	.9347
7	-51.305	2.547	-65.505	4.004	.0197	1334.7	1.1911	1332.04	34.943	566.270	1.184	.053	.9303	.9320
8	-51.539	2.235	-66.554	3.975	.0234	1352.1	1.2050	1347.54	35.522	570.115	1.186	.054	.9258	.9276
9	-51.555	1.590	-65.334	3.965	.0221	1369.4	1.2151	1363.19	36.319	574.002	1.189	.055	.9217	.9236
10	-52.141	1.434	-65.111	3.973	.0243	1386.7	1.2296	1377.17	37.035	577.934	1.193	.057	.9142	.9193
11	-52.420	.930	-65.555	3.964	.0309	1404.0	1.2384	1389.7[illegible]	37.505	581.924	1.198	.059	.8944	.8971
12	-52.708	.552	-66.562	3.954	.0370	1421.4	1.2456	1399.92	38.250	585.980	1.203	.062	.8773	.8805
13	-53.012	.102	-66.946	3.934	.0423	1438.8	1.2543	1410.74	38.874	590.107	1.210	.065	.8620	.8657
14	-53.335	-.391	-67.233	3.921	.0467	1456.2	1.2616	1421.36	39.537	594.315	1.217	.068	.8476	.8518
15	-53.594	-.929	-67.522	3.928	.0542	1474.3	1.2691	1432.16	40.229	598.516	1.223	.071	.8345	.8391
16	-54.035	-1.439	-68.054	3.979	.0622	1492.4	1.2735	1442.15	40.970	703.031	1.227	.074	.8147	.8200
17	-54.312	-1.748	-68.539	4.057	.0735	1510.3	1.2907	1451.29	41.440	707.593	1.229	.077	.7867	.7928
18	-54.376	-1.516	-69.251	4.355	.0842	1529.4	1.2871	1461.65	42.153	712.339	1.228	.080	.7593	.7663
19	-55.453	-1.973	-70.134	4.521	.0933	1549.4	1.2951	1475.21	42.955	717.303	1.224	.080	.7424	.7497
20	-55.047	-2.412	-71.130	5.055	.0953	1569.5	1.3107	1492.33	43.773	722.532	1.214	.079	.7196	.7272
21	-[illegible].594	-3.111	-72.410	5.716	.1021	1591.2	1.3240	1533.4[illegible]	44.534	728.119	1.198	.078	.6804	.6885

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.203 ISEN. EFF.= .845 POLY. EFF.= .850 DELTA T ON T = .064

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0744	545.15	395.52	673.33	631.434	593.929	24.223	19.315	.5742	35.97	24.47	63.453	.0923
2	7.1635	549.72	392.05	674.43	631.575	593.960	24.235	19.316	.5793	35.55	22.59	54.790	.0922
3	7.2477	552.52	393.64	675.52	631.916	594.096	24.249	19.313	.5797	35.12	20.62	43.869	.0922
4	7.3309	555.53	395.31	675.93	632.190	594.154	24.252	19.306	.5809	34.69	18.58	30.606	.0922
5	7.4132	561.03	381.97	676.71	632.355	594.174	24.277	19.291	.5824	34.25	16.49	23.918	.0921
6	7.4947	565.60	373.55	[illegible]	632.519	594.125	24.274	19.269	.5841	33.79	14.36	22.630	.0920
7	7.5755	570.36	375.37	682.55	632.711	594.097	24.270	19.241	.5839	33.30	12.21	17.605	.0919
8	7.6555	573.97	372.52	684.25	632.955	594.150	24.255	19.203	.5872	32.95	10.03	13.735	.0917
9	7.7355	577.43	369.29	685.42	633.049	594.150	24.229	19.170	.5842	32.60	7.85	10.460	.0915
10	7.8150	579.60	365.97	685.55	633.355	594.391	24.174	19.125	.5934	32.32	5.66	8.997	.0913
11	7.8935	579.53	367.42	685.43	634.413	595.475	24.095	19.070	.5875	32.41	3.49	7.933	.0909
12	7.9752	579.55	367.21	685.59	635.250	596.522	23.995	19.023	[illegible]	32.49	1.38	6.720	.0904
13	8.0511	572.99	365.13	680.03	635.90[illegible]	597.590	23.865	18.959	.5913	32.58	-.66	6.146	.0900
14	8.1457	567.31	354.39	674.24	635.382	558.709	23.695	18.916	.5733	32.71	-2.61	5.839	.0896
15	8.2325	559.14	361.43	665.74	605.593	559.806	23.495	18.865	.5635	32.05	-4.46	5.780	.0892
16	8.3222	540.21	360.33	654.34	607.279	571.739	23.255	18.729	.5575	33.41	-5.17	5.375	.0887
17	8.4135	525.95	351.73	639.13	635.630	574.779	22.933	18.333	.5435	34.47	-7.07	5.459	.0881
18	8.5155	501.32	351.19	618.37	539.555	577.675	22.657	19.732	.5244	35.74	-8.86	7.433	.0876
19	8.6213	472.23	352.21	599.11	539.407	579.654	22.273	18.793	.4999	36.72	-9.69	9.529	.0874
20	8.7375	432.74	342.24	551.72	607.037	591.919	21.944	15.823	.4603	38.34	-10.03	16.211	.0871
21	8.8575	374.03	333.37	501.33	606.033	595.236	21.323	18.855	.4222	41.71	-3.35	1665.883	.0868

BLADE DATA

STREAM-LINE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-[illegible]	.429	[illegible]	[illegible]	.13[illegible]	1250.7	[illegible]	1322.4[illegible]	31.331	520.405	1.040	.150	.9068	.9635
2	-1.0[illegible]	[illegible]	[illegible]	[illegible]	.0395	[illegible]	[illegible]	1040.31	32.413	523.354	[illegible]	.150	.9591	.9613
3	-3.535	1.313	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	105[illegible]	32.944	[illegible].762	[illegible]	.150	[illegible]	.9604
4	-[illegible].144	1.234	[illegible].350	[illegible]	.0363	1305.[illegible]	.9252	107[illegible]	33.431	[illegible].340	1.651	.151	.9559	.9599
5	-[illegible].312	.433	[illegible].12[illegible]	[illegible]	[illegible]	[illegible]	.9392	1093.32	34.024	[illegible].120	[illegible]	.151	.9543	.9574
6	-[illegible]	[illegible]	-5[illegible]	[illegible]	.3330	[illegible].334.1	.9535	1111.07	34.[illegible]	[illegible].303	1.657	.152	.9527	.9559
7	[illegible].423	[illegible]	[illegible]	[illegible]	.0348	1349.3	.9535	1124.49	35.115	569.493	1.651	.152	.9502	.9536
8	-[illegible].776	-.319	-5[illegible].323	[illegible]	.0415	1363.5	.9824	1145.2[illegible]	35.637	572.590	1.650	.152	.9462	.9498
9	-[illegible].104	[illegible]	[illegible]	[illegible]	.0442	1377.9	.9973	1162.[illegible]	36.108	575.426	1.648	.153	.9420	.9460
10	[illegible].914	[illegible]	[illegible]	[illegible]	[illegible]	1392.1	1.0106	[illegible]	36.550	579.183	1.645	.153	.9343	.9392
11	-6.70[illegible]	[illegible]	[illegible]	[illegible]	.0617	1406.5	1.0194	1189.33	[illegible]	[illegible].497	1.639	.165	.9168	.9224
12	-[illegible].936	.1[illegible]	-51.315	[illegible]	.0739	1421.0	1.0287	1201.21	37.240	[illegible]85.5[illegible]	1.632	.157	.8992	.9059
13	-7.29[illegible]	.[illegible]32	-51.3[illegible]	[illegible]	.0857	1435.5	1.0332	1213.40	37.[illegible]	[illegible]59.364	1.623	.158	.8816	.8894
14	-7.[illegible]30	.[illegible]39	-5[illegible].42[illegible]	[illegible]	.0375	1450.[illegible]	1.0476	1225.00	37.973	[illegible].351	1.612	.159	.8632	.8721
15	-7.932	1.3[illegible]2	-63.15[illegible]	[illegible]	[illegible]	1466.3	1.0573	1235.24	38.22[illegible]	[illegible].067	1.598	.164	.8449	.8548
16	-8.205	1.4[illegible]	-64.[illegible]2	[illegible]	[illegible]	1482.[illegible]	1.0637	12[illegible]	38.440	730.549	1.582	.171	.8193	.8306
17	-8.593	2.595	-65.133	[illegible]	.1477	1499.0	1.0657	1255.42	38.434	734.555	1.564	.173	.7849	.7979
18	-9.202	3.358	-65.321	7.319	.1692	1515.7	1.0663	1259.81	38.352	709.054	1.547	.175	.7509	.7655
19	-9.313	4.153	-71.24[illegible]	5.453	.1714	1535.5	1.0795	1274.17	39.035	713.316	1.519	.173	.7280	.7441
20	-[illegible].304	4.532	-72.541	3.317	.1911	1555.2	1.0692	1289.82	39.043	719.055	1.486	.170	.7030	.7191
21	-[illegible].540	4.916	-73.792	11.752	.2107	157[illegible]	1.0964	1301.03	40.347	725.049	1.451	.168	.6655	.6825

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.603 ISEN. EFF.= .806 POLY. EFF.= .875 DELTA T ON T = .167

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.25[illegible]	544.73	603.3[illegible]	853.3[illegible]	645.132	533.545	31.22[illegible]	21.599	.7455	43.12	24.87	59.510	.0997
2	7.3317	551.44	595.1[illegible]	893.03	647.714	533.173	31.11[illegible]	21.522	.7424	42.46	22.69	-115.572	.0994
3	7.4002	557.03	584.50	892.33	647.507	532.[illegible]	31.33[illegible]	21.471	.7454	41.91	20.52	-34.761	.0992
4	7.46[illegible]	561.59	584.05	882.53	647.455	533.38[illegible]	30.991	21.442	.7451	41.44	18.36	-22.599	.0991
5	7.534[illegible]	565.32	579.25	88[illegible]	647.335	533.522	30.96[illegible]	21.432	.7447	41.04	16.22	-17.926	.0990
6	7.601[illegible]	563.36	575.12	881.74	647.740	533.387	30.957	21.438	.7442	40.71	14.12	-15.660	.0990
7	7.655[illegible]	570.27	572.23	891.54	646.205	535.452	30.973	21.459	.7437	40.48	12.06	-14.511	.0990
8	7.7325	571.59	571.43	881.41	645.994	534.093	31.03[illegible]	21.495	.7431	40.36	10.05	-14.030	.0990
9	7.745[illegible]	571.97	569.53	881.05	649.370	535.625	31.05[illegible]	21.546	.7422	40.30	8.08	-14.058	.0991
10	7.854[illegible]	570.05	570.72	880.17	651.160	537.073	31.103	21.510	.7405	40.42	6.14	-14.521	.0991
11	7.9315	562.00	577.37	878.74	653.979	590.083	31.121	21.638	.7375	41.12	4.25	-15.355	.0990
12	7.9935	552.57	584.60	876.21	656.723	533.203	31.13[illegible]	21.779	.7334	41.55	2.40	-16.622	.0989
13	8.0635	541.45	590.93	872.15	659.425	596.500	31.12[illegible]	21.883	.7280	42.65	.59	-18.431	.0988
14	8.1412	527.55	598.30	866.39	662.078	600.035	31.08[illegible]	22.001	.7203	43.56	-1.19	-20.920	.0988
15	8.2123	511.00	601.35	857.23	664.440	603.699	31.00[illegible]	22.132	.7114	44.54	-2.93	-24.518	.0987
16	8.2920	[illegible]	609.79	840.13	667.905	608.702	30.97[illegible]	22.279	.6993	46.11	-4.62	-23.783	.0986
17	8.3749	591.33	624.00	833.07	672.350	615.514	30.693	22.441	.6847	48.51	-6.17	-35.208	.0982
18	8.4641	510.15	535.79	819.15	677.452	622.542	30.451	22.613	.6562	51.26	-7.50	-57.237	.0979
19	8.5623	467.45	631.21	785.49	676.131	627.157	30.02[illegible]	22.808	.6395	53.48	-8.57	-113.874	.0988
20	8.6719	413.11	622.52	743.02	678.714	632.292	29.51[illegible]	23.005	.60[illegible]	56.56	-9.33	-485.531	.0980
21	8.8019	333.15	625.34	705.29	680.979	639.547	29.95[illegible]	23.217	.5712	61.94	-9.37	**********	.0978

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-45.926	6.498	.0523	1293.4	.7967	944.11	32.310	657.306	2.125	.250	.9607	.9646
2	-41.167	1.233	-47.452	5.365	.0534	1305.9	.8132	963.38	33.235	659.371	2.117	.243	.9586	.9628
3	-41.717	.831	-47.949	5.231	.0544	1318.1	.8282	980.94	33.652	662.615	2.112	.245	.9566	.9610
4	-42.332	.172	-48.432	5.100	.0553	1330.1	.8419	997.11	34.032	665.246	2.109	.248	.9549	.9594
5	-42.930	-.533	-48.903	5.973	.0562	1342.0	.8544	1012.13	34.324	667.573	2.107	.248	.9531	.9578
6	-43.506	-1.135	-49.300	5.855	.0571	1353.8	.8661	1025.19	34.339	670.503	2.106	.249	.9513	.9561
7	-44.044	-1.235	-49.793	5.750	.0591	1365.5	.8754	1033.77	35.374	673.141	2.108	.250	.9486	.9537
8	-44.544	-1.055	-50.213	5.059	.0627	1377.3	.8848	1043.45	35.754	675.795	2.110	.251	.9444	.9499
9	-45.014	-.730	-50.538	5.625	.0663	1389.0	.8926	1059.54	36.133	678.471	2.113	.251	.9402	.9461
10	-45.457	-.271	-51.038	5.631	.0734	1400.8	.8975	1066.76	36.442	681.180	2.116	.255	.9328	.9395
11	-45.883	.312	-51.530	5.704	.0925	1412.7	.8942	1065.45	36.439	683.944	2.116	.261	.9145	.9230
12	-46.245	1.048	-52.151	5.365	.1108	1424.3	.8936	1063.95	36.450	686.787	2.119	.266	.8968	.9070
13	-46.701	1.949	-52.541	5.140	.1235	1437.3	.8865	1061.95	36.403	689.720	2.116	.271	.8792	.8912
14	-47.107	3.031	-53.502	6.555	.1451	1450.0	.8816	1059.23	36.459	692.760	2.115	.276	.8613	.8751
15	-47.520	4.134	-54.557	7.147	.1629	1463.2	.8757	1056.48	35.493	695.928	2.110	.281	.8438	.8592
16	-47.952	5.478	-55.322	7.970	.1973	1477.0	.8653	1047.01	36.233	699.264	2.101	.288	.8191	.8368
17	-48.430	6.813	-57.033	9.109	.2213	1491.7	.8492	1025.33	35.735	702.949	2.089	.297	.7859	.8067
18	-48.957	8.222	-59.064	10.078	.2535	1507.6	.8255	1010.35	35.359	706.781	2.072	.305	.7538	.7774
19	-49.535	9.471	-62.331	12.756	.2659	1525.0	.8214	1009.53	35.504	711.143	2.043	.307	.7345	.7595
20	-50.389	10.330	-65.795	15.403	.2805	1544.6	.8177	1007.62	35.050	716.076	2.009	.309	.7126	.7391
21	-51.301	13.090	-70.535	19.175	.3153	1567.7	.8063	993.81	35.394	722.005	1.970	.313	.6814	.7039

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.094 ISEN. EFF.= .862 POLY. EFF.= .875 DELTA T ON T = .272

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	------VELOCITIES------ MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	895.77	710.74	1147.25	676.218	557.312	35.903	19.407	.9919	38.67	19.79	-2.220	.0921
2	7.4931	882.39	713.33	1136.73	677.211	570.305	35.092	19.732	.9763	39.08	17.64	-2.359	.0932
3	7.5471	869.73	713.75	1127.03	678.277	573.196	35.214	20.048	.9590	39.49	15.57	-2.528	.0942
4	7.5943	857.79	715.35	1117.39	679.334	575.959	35.352	20.353	.9449	39.69	13.58	-2.729	.0952
5	7.6459	846.54	715.72	1109.19	680.345	578.562	35.475	20.542	.9400	40.25	11.67	-2.965	.0961
6	7.6950	835.13	715.45	1101.10	681.340	581.064	35.595	20.915	.9312	40.59	9.82	-3.239	.0969
7	7.7405	826.23	717.17	1094.00	682.544	583.566	36.721	21.173	.9232	40.95	8.03	-3.554	.0977
8	7.7977	815.34	719.20	1087.47	684.111	586.231	36.855	21.420	.9163	41.36	6.30	-3.917	.0984
9	7.8435	807.41	721.92	1083.03	685.832	588.839	37.023	21.559	.9093	41.80	4.62	-4.342	.0991
10	7.9021	796.34	727.33	1078.71	688.149	591.950	37.171	21.932	.9039	42.38	2.99	-4.849	.0996
11	7.9563	778.06	740.11	1073.54	692.341	597.031	37.239	22.121	.8937	43.57	1.41	-5.479	.0998
12	8.0117	759.19	753.44	1069.60	695.695	602.151	37.32[illegible]	22.348	.8857	44.78	-.11	-6.300	.1000
13	8.0633	739.20	765.55	1065.12	701.139	607.417	37.401	22.575	.8812	46.05	-1.58	-7.447	.1001
14	8.1231	715.36	780.01	1059.33	705.622	612.932	37.434	22.805	.8723	47.42	-2.99	-9.109	.1002
15	8.1915	691.93	791.41	1051.17	709.730	618.557	37.391	23.038	.8619	48.84	-4.36	-11.972	.1003
16	8.2575	654.71	807.33	1039.74	715.335	626.075	37.221	23.278	.8470	50.98	-5.68	-16.343	.1001
17	8.3235	599.91	833.31	1027.27	723.371	636.316	35.975	23.534	.8305	54.27	-6.91	-25.524	.0996
18	8.4102	535.50	853.45	1012.73	731.635	647.067	35.717	23.813	.8121	58.06	-7.93	-49.786	.0991
19	8.5014	480.04	861.36	996.53	734.531	654.315	36.254	24.115	.7957	60.86	-8.77	-103.677	.0993
20	8.6050	411.21	866.41	959.04	735.319	662.539	35.613	24.444	.7611	64.61	-9.51	-73.425	.0994
21	8.7339	310.53	865.30	940.73	747.131	674.206	35.633	24.309	.7392	70.73	-9.37	***********	.0991

ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
[illegible]	.9616
[illegible]	.9593
.9525	.9581
[illegible]	.9565
[illegible]	.9546
.9467	.9531
.9436	.9505
.9391	.9464
[illegible]	.9423
[illegible]	.9352
[illegible]	.9172
.8961	.8999
[illegible]	.8827
[illegible]	.8691
[illegible]	.8478
.7940	.8231
.7612	.7896
.7252	.7576
.7342	.7387
[illegible]	.7160
.6505	.6906

DELTA T ... T = .354

STATION [illegible] FLOW FIELD SOLUTION

MACH NO.	MERIDIONAL ANGLE WHIRL	MERIDIONAL ANGLE SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1.16[illegible]	46.6[illegible]	10.63	[illegible]	.1037
[illegible]	49.17	[illegible]	-5.233	.1028
[illegible]	[illegible]	[illegible]	[illegible]	.1037
[illegible]	[illegible]	[illegible]	-7.132	.1044
[illegible]	[illegible]	[illegible]	-11.603	.1050
[illegible]	43.63	[illegible]	-57.919	.1054
[illegible]	[illegible]	[illegible]	[illegible]	.1056
[illegible]	[illegible]	[illegible]	[illegible]	.1057
[illegible]	[illegible]	[illegible]	[illegible]	.1057
[illegible]	[illegible]	2.41	[illegible]	.1055
[illegible]	[illegible]	[illegible]	[illegible]	.1047
[illegible]	[illegible]	[illegible]	[illegible]	.1034
[illegible]	[illegible]	[illegible]	[illegible]	.1031
[illegible]	[illegible]	[illegible]	[illegible]	.1022
[illegible]	[illegible]	[illegible]	[illegible]	.1012
[illegible]	[illegible]	[illegible]	[illegible]	.0999
[illegible]	[illegible]	[illegible]	[illegible]	.0982
1.0[illegible]	[illegible]	[illegible]	[illegible]	.0970
1.00[illegible]	65.70	[illegible]	[illegible]	.0960
[illegible]	66.40	[illegible]	[illegible]	.0955
[illegible]	76.30	[illegible]	23.749	.0948

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.947	10.991	-14.230	5.552	.0534	1344.7	.8056	961.47	34.270	568.477	3.513	.447	.9683	.9666
2	-13.334	10.594	-19.135	5.771	.0854	1351.2	.7947	950.66	34.444	569.311	3.508	.448	.9581	.9647
3	-14.034	10.315	-19.945	5.911	.0900	1357.8	.7870	943.74	34.630	571.367	3.503	.448	.9559	.9629
4	-14.723	9.773	-20.753	5.024	.0916	1364.5	.7820	933.50	34.823	572.985	3.498	.443	.9530	.9611
5	-15.439	9.077	-21.531	6.092	.0931	1371.4	.7794	937.74	35.022	574.464	3.493	.443	.9516	.9593
6	-16.159	9.310	-22.277	5.109	.0947	1378.5	.7787	933.10	35.225	576.063	3.487	.443	.9493	.9573
7	-16.893	7.026	-23.003	5.110	.0949	1385.7	.7767	933.24	35.397	577.703	3.476	.450	.9461	.9546
8	-17.584	7.153	-23.725	5.141	.1042	1393.0	.7764	940.01	35.505	579.388	3.464	.451	.9418	.9503
9	-18.222	5.931	-24.425	5.203	.1103	1400.5	.7734	942.32	35.619	581.119	3.450	.451	.9359	.9459
10	-18.801	5.945	-25.032	5.201	.1221	1408.2	.7775	941.51	35.537	582.902	3.430	.453	.9270	.9386
11	-19.329	5.734	-25.767	6.237	.1343	1416.2	.7612	925.04	35.036	584.762	3.394	.453	.9055	.9281
12	-19.815	7.654	-26.117	5.302	.1546	1424.5	.7454	903.02	34.494	586.722	3.357	.465	.8842	.9119
13	-20.259	7.652	-26.715	5.597	.2141	1433.3	.7230	892.33	33.941	588.792	3.316	.471	.8624	.8833
14	-20.561	9.235	-27.370	5.715	.2436	1442.5	.7113	873.97	33.355	590.985	3.279	.479	.8399	.8639
15	-21.024	9.571	-28.130	7.111	.2716	1452.4	.6932	855.09	32.731	593.317	3.239	.485	.8174	.8445
16	-21.345	10.770	-28.538	7.292	.3122	1462.8	.6590	817.51	31.901	595.925	3.203	.493	.7864	.8177
17	-21.615	12.015	-29.372	7.347	.3658	1474.4	.6356	749.44	30.231	598.528	3.174	.522	.7447	.7818
18	-21.819	13.139	-30.139	9.319	.4224	1487.7	.5280	657.42	29.540	701.182	3.143	.546	.7046	.7478
19	-21.833	13.435	-32.179	10.295	.4450	1503.0	.4916	624.53	28.302	705.658	3.125	.560	.6828	.7281
20	-21.680	13.834	-35.710	14.023	.4774	1520.7	.4404	504.36	27.383	710.350	3.105	.576	.6586	.7070
21	-21.371	13.133	-45.793	23.421	.5255	1544.2	.3367	435.55	26.547	715.985	3.074	.602	.6237	.6764

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.323 ISEN. EFF.= .839 POLY. EFF.= .863 DELTA T ON T = .486

STATION 10 FLOW FIELD DESCRIPTION

STREAM -LIN	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5745	943.54	1040.54	1333.51	750.755	602.741	51.625	23.917	1.1124	50.97	7.82	9.349	.1064
2	7.6134	944.03	1035.21	1330.45	750.951	603.636	51.553	23.983	1.1091	50.84	7.79	9.238	.1066
3	7.6527	946.59	1031.83	1334.09	751.133	604.240	51.491	23.910	1.1071	50.63	7.69	9.493	.1066
4	7.6924	950.40	1027.41	1333.70	751.355	604.662	51.405	23.911	1.1059	50.39	7.53	9.626	.1065
5	7.7323	954.84	1022.37	1333.12	751.559	604.935	51.321	23.898	1.1051	50.12	7.33	9.550	.1064
6	7.7723	959.46	1018.51	1332.53	751.774	605.270	51.243	23.876	1.1045	49.84	7.11	9.289	.1062
7	7.8124	962.57	1014.35	1331.72	752.021	605.732	51.115	23.852	1.1033	49.61	6.86	8.894	.1061
8	7.8527	963.95	1010.70	1329.64	752.376	606.547	50.910	23.830	1.1008	49.48	6.60	8.415	.1058
9	7.8933	964.75	1007.01	1327.35	752.725	607.403	50.697	23.809	1.0951	49.35	6.33	7.874	.1056
10	7.9344	961.54	1005.94	1324.37	753.601	609.062	50.410	23.798	1.0942	49.42	6.03	7.300	.1052
11	7.9755	944.09	1013.75	1319.15	755.744	613.255	49.872	23.770	1.08[illegible]	50.22	5.72	6.732	.1044
12	8.0202	925.35	1021.51	1313.54	759.851	617.541	49.32[illegible]	23.756	1.0[illegible]	51.05	5.37	6.185	.1036
13	8.0657	905.55	1029.33	1307.58	763.156	622.259	48.703	23.745	1.0553	51.97	4.98	5.664	.1028
14	8.1131	882.32	1039.97	1300.97	766.771	627.333	48.187	23.739	1.0532	53.00	4.53	5.173	.1019
15	8.1627	858.24	1048.07	1293.59	770.445	632.001	47.537	23.742	1.0469	54.12	4.01	4.714	.1011
16	8.2152	818.71	1070.53	1293.45	777.452	640.556	47.07[illegible]	23.752	1.0391	56.13	3.36	4.294	.0999
17	8.2730	652.22	1112.04	1283.13	789.262	652.531	46.041	23.917	1.0235	59.61	2.49	3.931	.0983
18	8.3395	567.31	1154.43	1286.30	801.721	665.726	45.194	23.936	1.0171	63.93	1.25	3.665	.0965
19	8.4133	510.33	1173.49	1279.55	808.991	674.431	45.924	24.129	1.0055	66.48	-.52	3.484	.0964
20	8.5394	430.03	1195.41	1270.42	817.540	685.051	45.624	24.397	.9905	70.21	-2.92	3.314	.0959
21	8.6339	250.24	1230.25	1256.55	830.664	701.378	45.161	24.777	.9695	78.23	-6.18	3.053	.0951

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITY MERID	VELOCITY TANG	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6139	925.70	1033.36	1383.13	750.765	591.764	51.626	22.330	1.1633	48.17	9.06	26.367	.1016
2	7.6572	956.46	1023.34	1404.82	750.981	588.110	51.553	21.796	1.1819	47.09	6.99	43.180	.0990
3	7.7136	983.57	1023.65	1419.63	751.193	584.855	51.491	21.325	1.1967	46.14	6.67	88.337	.0982
4	7.7585	1005.04	1013.64	1430.99	751.395	582.378	51.409	20.950	1.2093	45.38	8.61	912.073	.0963
5	7.8022	1020.63	1013.30	1438.60	751.589	580.762	51.329	20.706	1.2169	44.81	8.37	-115.514	.0960
6	7.8447	1031.44	1003.11	1442.98	751.774	579.906	51.243	20.547	1.2215	44.37	8.13	-58.823	.0954
7	7.8865	1037.47	1004.34	1444.32	752.021	579.333	51.115	20.462	1.2227	44.08	7.91	-42.933	.0951
8	7.9273	1036.92	1001.13	1442.76	752.376	580.559	50.910	20.436	1.2207	43.94	7.73	-37.326	.0948
9	7.9639	1038.03	997.42	1439.53	752.725	581.673	50.637	20.454	1.2163	43.86	7.59	-35.123	.0947
10	8.0049	1032.42	995.37	1434.79	753.661	583.763	50.410	20.505	1.2106	43.98	7.48	-37.984	.0946
11	8.0513	1014.60	1004.34	1427.62	756.744	588.577	49.872	20.580	1.1996	44.71	7.39	-42.949	.0942
12	8.0933	995.11	1012.39	1419.56	759.381	593.647	49.327	20.671	1.1878	45.49	7.30	-53.565	.0938
13	8.1352	973.41	1027.55	1410.63	763.188	599.080	48.766	20.779	1.1753	46.37	7.21	-80.602	.0934
14	8.1800	948.62	1030.47	1400.76	766.771	604.995	48.137	20.901	1.1611	47.36	7.08	-230.459	.0931
15	8.2249	921.90	1043.14	1389.89	770.445	611.218	47.537	21.041	1.1463	48.45	6.91	171.608	.0927
16	8.2714	882.41	1063.32	1361.75	777.452	620.160	47.075	21.208	1.1315	50.31	6.62	57.057	.0921
17	8.3210	820.35	1104.52	1376.73	789.262	633.239	46.640	21.432	1.1158	53.43	6.07	34.633	.0912
18	8.3756	740.07	1149.45	1367.10	801.721	646.014	46.164	21.769	1.0954	57.22	4.39	25.901	.0905
19	8.4357	671.36	1170.74	1349.55	808.991	659.296	45.924	22.275	1.0722	60.17	3.23	21.311	.0910
20	8.5034	563.55	1195.40	1321.58	817.540	674.112	45.624	23.052	1.0385	64.76	.55	22.543	.0921
21	8.6199	290.13	1233.11	1268.17	830.864	698.983	45.159	24.490	.9730	76.50	-4.27	-27.461	.0943

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BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	48.173	-.044	.0000	0.0	1.1633	1383.10	51.626	750.765	3.513	.447	.9603	.9666
2	47.904	-37.330	47.091	-.813	0.0000	0.0	1.1819	1404.82	51.553	750.981	3.508	.449	.9531	.9647
3	47.011	-34.432	46.145	-.865	0.0000	0.0	1.1967	1419.63	51.491	751.193	3.503	.448	.9559	.9629
4	46.355	-31.453	45.335	-.971	0.0000	0.0	1.2093	1430.99	51.409	751.395	3.496	.449	.9538	.9611
5	45.866	-28.394	44.806	-1.060	0.0000	0.0	1.2169	1438.60	51.329	751.589	3.493	.449	.9516	.9593
6	45.499	-25.297	44.373	-1.125	0.0000	0.0	1.2215	1442.98	51.243	751.774	3.487	.449	.9493	.9573
7	45.190	-22.153	44.083	-1.105	0.0000	0.0	1.2227	1444.32	51.115	752.021	3.476	.450	.9461	.9546
8	44.335	-19.111	43.939	-.937	0.0000	0.0	1.2207	1442.76	50.910	752.376	3.464	.451	.9410	.9503
9	44.731	-16.035	43.856	-.873	0.0000	0.0	1.2163	1439.53	50.637	752.725	3.458	.451	.9359	.9459
10	44.584	-12.773	43.981	-.603	0.0000	0.0	1.2105	1434.79	50.410	753.661	3.430	.453	.9270	.9384
11	44.499	-9.163	44.709	.210	0.0000	0.0	1.1995	1427.62	49.872	756.744	3.394	.459	.9055	.9201
12	44.499	-5.322	45.493	.994	0.0000	0.0	1.1878	1419.56	49.327	759.381	3.357	.465	.8842	.9019
13	44.623	-1.571	46.365	1.742	0.0000	0.0	1.1750	1410.63	48.766	763.188	3.318	.471	.8624	.8833
14	44.897	1.824	47.362	2.465	0.0000	0.0	1.1611	1400.76	48.137	766.771	3.279	.478	.8399	.8639
15	45.266	5.257	48.449	3.182	0.0000	0.0	1.1463	1389.89	47.537	770.445	3.239	.495	.8174	.8445
16	45.843	9.614	50.312	4.469	0.0000	0.0	1.1315	1351.70	47.075	777.452	3.203	.499	.7864	.8177
17	45.985	15.726	53.425	7.440	0.0000	0.0	1.1158	1376.73	46.640	789.262	3.174	.522	.7447	.7818
18	46.517	23.476	57.225	10.708	0.0000	0.0	1.0954	1367.10	46.164	801.721	3.143	.540	.7046	.7470
19	47.539	31.620	60.165	12.623	0.0000	0.0	1.0722	1349.55	45.924	808.991	3.125	.563	.6828	.7281
20	48.963	39.451	64.759	15.797	0.0000	0.0	1.0385	1321.58	45.624	817.540	3.105	.576	.6546	.7070
21	50.814	45.692	70.496	25.682	0.0000	0.0	.9790	1268.17	45.159	830.864	3.074	.602	.6237	.6764

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.323 ISEN. EFF.= .839 POLY. EFF.= .863 DELTA T ON T = .486

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7130	1214.01	782.50	1444.40	750.765	578.547	49.242	19.676	1.2241	32.81	5.21	-3.688	.0916
2	7.7548	1192.21	759.36	1413.77	750.981	586.020	49.170	20.531	1.1906	32.51	4.71	-3.323	.0944
3	7.7941	1170.01	735.99	1382.25	751.193	593.537	49.094	21.419	1.1567	32.17	4.21	-3.047	.0972
4	7.8330	1147.54	712.31	1350.64	751.395	600.896	48.996	22.295	1.1234	31.83	3.73	-2.882	.0999
5	7.8716	1124.72	690.45	1319.75	751.589	607.924	48.868	23.142	1.0914	31.55	3.29	-2.728	.1025
6	7.9100	1101.00	671.00	1289.36	751.774	614.676	48.551	23.934	1.0604	31.36	2.90	-2.689	.1049
7	7.9434	1077.44	653.90	1260.32	752.021	621.052	48.405	24.658	1.0313	31.25	2.61	-2.627	.1069
8	7.9872	1054.64	637.63	1232.44	752.376	627.161	48.091	25.313	1.0036	31.16	2.43	-2.624	.1087
9	8.0264	1033.00	622.49	1206.57	752.725	632.730	47.730	25.905	.9753	31.06	2.35	-2.644	.1103
10	8.0651	1014.37	605.61	1182.95	753.661	638.343	47.499	26.443	.9549	30.96	2.36	-2.683	.1116
11	8.1007	994.21	593.11	1158.71	756.744	646.141	47.023	26.928	[illegible]	30.90	2.44	-2.747	.1122
12	8.1432	974.35	583.24	1135.57	759.861	653.680	46.547	27.362	[illegible]	30.90	2.59	-2.844	.1127
13	8.1907	956.92	574.35	1115.97	763.188	659.662	46.180	27.750	[illegible]	30.98	2.77	-2.970	.1131
14	8.2341	939.79	566.34	1097.55	766.771	667.634	45.804	28.090	[illegible]	31.10	2.96	-3.129	.1133
15	8.2784	923.67	560.88	1080.63	770.445	674.377	45.426	28.377	[illegible]	31.27	3.16	-3.332	.1133
16	8.3235	912.57	559.41	1070.38	777.452	683.249	45.149	28.599	.8356	31.51	3.41	-3.619	.1127
17	8.3693	906.41	564.91	1067.80	789.262	695.588	44.937	28.738	.8263	31.92	3.30	-4.132	.1113
18	8.4173	901.73	573.70	1069.84	801.721	707.783	44.703	28.752	.8208	32.56	3.00	-5.318	.1094
19	8.4692	901.23	592.79	1078.71	808.391	713.337	44.565	28.563	.8243	33.34	2.30	-8.930	.1078
20	8.5174	908.61	614.80	1097.07	817.540	718.564	44.356	28.114	.8353	34.08	.99	-137.290	.1053
21	8.5730	922.91	633.64	1120.62	830.864	728.000	43.920	27.479	.8480	34.56	-2.03	5.947	.1017

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.939	-24.847	32.507	.849	.0814	0.0	1.2241	1444.40	49.242	750.765	3.351	.447	.9176	.9302
2	31.931	-23.319	32.512	.860	.0801	0.0	1.1906	1413.77	49.170	750.981	3.346	.448	.9154	.9283
3	31.238	-21.313	32.172	.874	.0792	0.0	1.1567	1382.25	49.094	751.193	3.341	.448	.9132	.9264
4	30.938	-18.827	31.829	.891	.0732	0.0	1.1234	1350.64	48.996	751.395	3.334	.443	.9106	.9242
5	30.635	-16.636	31.345	.910	.0804	0.0	1.0914	1319.75	48.868	751.589	3.325	.443	.9075	.9216
6	30.429	-14.475	31.360	.931	.0841	0.0	1.0604	1289.36	48.551	751.774	3.311	.449	.9030	.9177
7	30.239	-12.334	31.232	.952	.0854	0.0	1.0313	1260.32	48.405	752.021	3.294	.450	.8974	.9128
8	30.166	-10.358	31.193	.973	.0925	0.0	1.0036	1232.44	48.031	752.376	3.272	.451	.8902	.9067
9	30.067	-8.240	31.059	.992	.0951	0.0	.9753	1206.57	47.730	752.725	3.252	.451	.8834	.9008
10	29.953	-6.178	30.363	1.010	.0974	0.0	.9549	1182.95	47.499	753.661	3.232	.453	.8744	.8931
11	29.879	-4.004	30.304	1.025	.0973	0.0	.9298	1158.71	47.023	756.744	3.200	.459	.8543	.8758
12	29.368	-1.937	30.405	1.037	.0970	0.0	.9060	1133.57	46.547	759.861	3.167	.465	.8348	.8567
13	29.938	.058	30.975	1.043	.0923	0.0	.8857	1115.97	46.180	763.188	3.142	.471	.8165	.8431
14	30.053	2.238	31.101	1.048	.0873	0.0	.8666	1097.55	45.804	766.771	3.117	.478	.7979	.8270
15	30.222	4.888	31.266	1.046	.0817	0.0	.8498	1080.63	45.426	770.445	3.091	.485	.7795	.8110
16	30.465	7.941	31.508	1.040	.0745	0.0	.8356	1070.38	45.149	777.452	3.072	.493	.7534	.7884
17	30.885	11.479	31.923	1.034	.0675	0.0	.8263	1067.80	44.937	789.262	3.058	.522	.7167	.7566
18	31.525	15.506	32.556	1.031	.0607	0.0	.8208	1063.84	44.703	801.721	3.042	.546	.6812	.7237
19	32.384	19.819	33.335	1.032	.0575	0.0	.8243	1078.71	44.565	808.391	3.032	.538	.6613	.7089
20	33.044	24.031	34.084	1.040	.0562	0.0	.8353	1097.07	44.356	817.540	3.018	.579	.6395	.6894
21	33.478	28.225	34.557	1.073	.0604	0.0	.8480	1120.62	43.920	830.864	2.989	.602	.6356	.6595

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.175 ISEN. EFF.= .808 POLY. EFF.= .829 DELTA T ON T = .486

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.722[illegible]	1024.35	324.55	1074.57	750.765	652.649	46.942	29.105	.8561	17.58	-2.23	-3.136	.1196
2	7.753[illegible]	1007.72	313.77	1056.41	750.931	652.971	46.845	29.536	.8339	17.55	-2.51	-5.935	.1207
3	7.7637	991.94	313.53	1040.36	751.193	652.055	46.739	29.928	.8248	17.55	-2.75	-6.953	.1216
4	7.8226	970.94	309.1[illegible]	1024.53	751.395	654.931	46.611	30.276	.8107	17.56	-2.93	-9.402	.1226
5	7.8572	962.74	304.35	1009.55	751.589	657.517	46.454	30.377	.7974	17.57	-3.06	-10.553	.1234
6	7.8923	945.30	293.53	993.15	751.774	670.565	46.155	30.429	.7825	17.56	-3.11	-13.354	.1238
7	7.9235	931.35	293.73	976.57	752.021	673.503	45.795	31.028	.7679	17.50	-3.07	-19.874	.1241
8	7.9674	916.04	287.53	959.21	752.376	676.432	45.330	31.175	.7533	17.43	-2.94	-31.992	.1241
9	8.0055	902.59	282.53	945.82	752.725	679.095	44.937	31.270	.7406	17.39	-2.72	-65.244	.1240
10	8.0475	892.50	279.50	935.27	753.061	681.672	44.575	31.339	.7309	17.39	-2.42	-1329.135	.1238
11	8.0935	880.96	276.55	923.35	756.744	686.598	44.240	31.374	.7191	17.43	-2.07	99.418	.1231
12	8.1335	869.53	273.50	911.84	759.881	691.492	43.801	31.387	.7075	17.46	-1.67	55.613	.1223
13	8.1735	865.21	272.43	907.39	763.148	695.482	43.537	31.387	.7022	17.48	-1.24	44.386	.1216
14	8.2252	861.55	271.40	903.30	766.771	699.593	43.373	31.379	.6970	17.49	-.82	42.133	.1208
15	8.2725	857.59	271.75	899.41	770.445	703.961	43.164	31.370	.6913	17.52	-.41	45.285	.1200
16	8.3214	859.46	272.47	901.52	777.452	710.676	43.035	31.360	.6904	17.59	-.03	55.151	.1189
17	8.3710	865.05	273.54	903.19	789.262	721.567	43.005	31.350	.6902	17.73	.30	73.347	.1170
18	8.4215	870.25	282.17	914.55	801.721	733.093	43.034	31.336	.6899	17.96	.59	147.186	.1151
19	8.4730	872.98	283.77	914.50	808.941	739.704	43.012	31.309	.6904	18.30	.61	336.410	.1140
20	8.5255	875.78	295.33	924.71	817.540	747.512	42.939	31.248	.6907	18.72	.94	263.746	.1126
21	8.5795	876.17	305.32	930.05	830.604	750.102	42.703	31.126	.6931	19.23	.58	75.314	.1103

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.41	17.235	1.391	.1599	0.0	.8561	1074.57	46.942	750.765	3.194	.447	.8750	.8934
2	16.193	-9.343	17.554	1.391	.1532	0.0	.8339	1055.93	46.845	750.961	3.188	.448	.8723	.8911
3	16.174	-8.412	17.549	1.375	.1573	0.0	.8248	1040.36	46.739	751.193	3.180	.443	.8695	.8887
4	16.165	-7.314	17.550	1.334	.1525	0.0	.8107	1024.69	46.511	751.395	3.172	.443	.8664	.8859
5	16.151	-7.137	17.572	1.421	.1542	0.0	.7974	1009.36	46.454	751.589	3.161	.443	.8627	.8827
6	16.103	-6.334	17.560	1.493	.1597	0.0	.7325	993.16	46.155	751.774	3.141	.449	.8563	.8772
7	16.015	-5.439	17.504	1.499	.1735	0.0	.7679	976.97	45.795	752.021	3.115	.450	.8486	.8704
8	15.908	-4.599	17.434	1.526	.1315	0.0	.7533	959.20	45.330	752.376	3.088	.451	.8393	.8623
9	15.825	-3.512	17.390	1.562	.1389	0.0	.7406	945.82	44.987	752.725	3.061	.451	.8305	.8546
10	15.799	-2.675	17.334	1.595	.1317	0.0	.7309	935.27	44.575	753.061	3.040	.453	.8212	.8465
11	15.534	-1.813	17.428	1.625	.1923	0.0	.7191	923.35	44.240	756.744	3.010	.459	.8022	.8299
12	15.311	-1.043	17.451	1.649	.1926	0.0	.7076	911.84	43.801	759.181	2.980	.465	.7833	.8134
13	15.338	-.413	17.475	1.667	.1931	0.0	.7022	907.39	43.537	763.189	2.960	.471	.7686	.8005
14	15.312	.133	17.439	1.677	.1754	0.0	.6970	903.30	43.373	766.771	2.951	.478	.7535	.7873
15	15.345	.919	17.520	1.679	.1659	0.0	.6913	899.41	43.164	770.445	2.937	.485	.7385	.7742
16	15.324	1.510	17.539	1.669	.1541	0.0	.6904	901.52	43.035	777.452	2.932	.499	.7171	.7556
17	16.073	2.534	17.728	1.655	.1417	0.0	.6902	903.19	43.005	789.262	2.931	.522	.6851	.7279
18	16.319	4.025	17.959	1.646	.1230	0.0	.6899	914.55	43.034	801.721	2.927	.546	.6541	.7009
19	16.551	5.331	18.333	1.642	.1231	0.0	.6904	913.50	43.012	808.391	2.927	.560	.6373	.6862
20	17.37[illegible]	6.832	18.727	1.593	.1190	0.0	.6907	924.71	42.939	817.540	2.922	.576	.6177	.6691
21	17.510	[illegible]	19.229	1.719	.1190	0.0	.6931	930.06	42.703	830.864	2.906	.602	.5876	.6427

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.022 ISEN. EFF.= .760 POLY. EFF.= .794 DELTA T ON T = .486

STATION 1, FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	886.35	95.01	891.53	750.765	685.354	44.632	32.346	.6949	6.18	-4.29	16.241	.1271
2	7.7075	884.42	94.13	889.42	750.981	685.881	44.465	32.280	.6930	6.08	-4.13	16.281	.1268
3	7.7436	882.48	92.33	887.30	751.193	686.404	44.292	32.208	.6911	5.97	-3.95	16.323	.1264
4	7.7803	880.29	90.72	884.95	751.395	686.901	44.104	32.131	.6890	5.88	-3.74	16.356	.1260
5	7.8133	877.70	89.28	882.23	751.589	687.541	43.898	32.049	.6856	5.81	-3.50	16.373	.1256
6	7.8590	869.29	87.44	873.65	751.774	688.966	43.501	31.964	.6792	5.74	-3.23	16.425	.1250
7	7.8994	858.91	85.52	863.16	752.021	690.721	43.045	31.876	.6702	5.69	-2.92	16.599	.1243
8	7.9402	846.88	83.55	850.99	752.376	692.795	42.547	31.790	.6598	5.63	-2.56	16.966	.1236
9	7.9836	835.43	81.75	839.42	752.725	694.758	42.084	31.707	.6499	5.59	-2.16	17.585	.1229
10	8.0284	829.06	80.64	832.97	753.601	696.588	41.779	31.630	.6441	5.56	-1.73	18.536	.1221
11	8.0740	820.30	79.45	824.74	756.744	700.808	41.408	31.565	.6359	5.53	-1.28	19.607	.1213
12	8.1224	811.73	78.33	815.50	759.891	705.205	41.035	31.514	.6268	5.51	-.84	21.369	.1204
13	8.1714	813.87	78.37	817.64	763.188	708.238	41.002	31.481	.6271	5.50	-.42	23.340	.1197
14	8.2212	815.43	78.43	819.19	766.771	711.626	40.977	31.469	.6268	5.49	-.05	27.118	.1191
15	8.2716	816.25	78.54	820.02	770.445	715.203	40.953	31.479	.6259	5.50	.28	31.722	.1185
16	8.3230	823.74	79.33	827.57	777.452	721.215	41.100	31.507	.6291	5.51	.55	39.352	.1177
17	8.3743	833.95	81.13	837.89	789.262	731.664	41.259	31.552	.6325	5.56	.75	47.969	.1162
18	8.4272	843.29	83.22	847.39	801.721	742.805	41.425	31.611	.6349	5.64	.90	63.798	.1146
19	8.4804	846.24	85.47	850.55	808.391	749.729	41.493	31.632	.6344	5.77	1.00	97.282	.1138
20	8.5345	847.98	88.33	852.62	817.540	758.031	41.537	31.701	.6326	5.98	1.06	220.997	.1129
21	8.5900	848.69	94.07	853.89	830.864	771.245	41.497	31.846	.6282	6.33	1.06	-610.607	.1112

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.034	6.183	2.218	.2389	0.0	.6949	891.53	44.632	750.765	3.037	.447	.8387	.8546
2	3.842	-.989	6.075	2.233	.2332	0.0	.6930	889.42	44.465	750.981	3.026	.448	.8266	.8510
3	3.717	-.931	5.973	2.256	.2384	0.0	.6911	887.30	44.292	751.193	3.014	.448	.8225	.8474
4	3.597	-.834	5.884	2.287	.2399	0.0	.6890	884.95	44.104	751.395	3.001	.449	.8181	.8435
5	3.480	-.770	5.808	2.329	.2426	0.0	.6856	882.23	43.898	751.589	2.987	.449	.8133	.8393
6	3.366	-.697	5.744	2.378	.2522	0.0	.6792	873.65	43.501	751.774	2.960	.449	.8048	.8318
7	3.252	-.609	5.686	2.434	.2533	0.0	.6702	863.16	43.045	752.021	2.929	.450	.7949	.8230
8	3.140	-.540	5.634	2.494	.2744	0.0	.6598	850.99	42.547	752.376	2.895	.451	.7838	.8130
9	3.034	-.479	5.591	2.556	.2843	0.0	.6499	839.42	42.084	752.725	2.864	.451	.7732	.8036
10	2.940	-.426	5.559	2.616	.2836	0.0	.6441	832.97	41.779	753.601	2.843	.453	.7640	.7954
11	2.861	-.374	5.530	2.669	.2890	0.0	.6359	824.74	41.408	756.744	2.818	.459	.7466	.7808
12	2.801	-.303	5.512	2.711	.2894	0.0	.6268	815.50	41.035	759.891	2.792	.465	.7294	.7648
13	2.763	-.221	5.500	2.737	.2774	0.0	.6271	817.64	41.002	763.188	2.790	.471	.7188	.7558
14	2.751	-.150	5.494	2.743	.2642	0.0	.6268	819.19	40.977	766.771	2.788	.473	.7079	.7460
15	2.770	-.147	5.496	2.726	.2500	0.0	.6259	820.02	40.953	770.445	2.787	.483	.6971	.7366
16	2.819	-.234	5.515	2.696	.2310	0.0	.6291	827.57	41.100	777.452	2.797	.499	.6887	.7224
17	2.892	-.397	5.558	2.666	.2131	0.0	.6325	837.89	41.259	789.262	2.808	.522	.6538	.6990
18	2.987	-.603	5.636	2.643	.1949	0.0	.6349	847.39	41.425	801.721	2.819	.546	.6274	.6761
19	3.114	-.820	5.768	2.653	.1871	0.0	.6344	850.55	41.493	808.391	2.824	.560	.6127	.6633
20	3.290	-.970	5.980	2.690	.1811	0.0	.6326	852.62	41.537	817.540	2.826	.576	.5956	.6484
21	3.508	-1.055	6.326	2.318	.1775	0.0	.6282	853.89	41.497	830.864	2.824	.602	.5693	.6253

STATION 1, INTEGRATED PERFORMANCE PRESSURE RATIO = 2.865 ISEN. EFF.= .718 POLY. EFF.= .756 DELTA T ON T = .466

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	992.93	0.00	992.93	750.765	669.589	42.329	28.202	.7829	0.00	-1.66	10.624	.1137
2	7.6774	989.79	0.00	989.79	750.981	670.319	42.090	28.182	.7800	0.00	-1.60	11.047	.1132
3	7.7159	986.32	0.00	986.32	751.193	671.097	41.844	28.104	.7768	0.00	-1.54	11.602	.1128
4	7.7553	982.48	0.00	982.48	751.395	671.925	41.590	28.029	.7733	0.00	-1.45	12.334	.1124
5	7.7958	979.21	0.00	979.21	751.589	672.611	41.330	27.957	.7694	0.00	-1.35	13.311	.1119
6	7.8375	966.53	0.00	966.53	751.774	674.872	40.827	27.892	.7591	0.00	-1.24	14.665	.1113
7	7.8808	952.62	0.00	952.62	752.021	677.322	40.270	27.832	.7459	0.00	-1.10	16.645	.1107
8	7.9257	937.24	0.00	937.24	752.376	680.077	39.692	27.781	.7333	0.00	-.94	19.705	.1100
9	7.9723	922.62	0.00	922.62	752.725	682.671	39.165	27.739	.7205	0.00	-.75	24.853	.1094
10	8.0203	915.29	0.00	915.29	753.661	684.722	38.882	27.707	.7138	0.00	-.56	34.682	.1090
11	8.0697	908.32	0.00	908.32	756.744	688.868	38.533	27.686	.7062	0.00	-.35	58.287	.1083
12	8.1235	900.35	0.00	900.35	759.381	693.209	38.285	27.675	.6979	0.00	-.15	176.609	.1075
13	8.1723	907.20	0.00	907.20	763.188	695.511	38.426	27.675	.7020	0.00	.03	-208.345	.1072
14	8.2245	913.94	0.00	913.94	766.771	698.115	38.571	27.684	.7059	0.00	.20	-70.688	.1068
15	8.2772	920.14	0.00	920.14	770.445	700.854	38.717	27.702	.7094	0.00	.34	-46.236	.1065
16	8.3302	934.40	0.00	934.40	777.452	705.718	39.051	27.727	.7179	0.00	.44	-35.670	.1058
17	8.3834	951.56	0.00	951.56	789.262	714.929	39.397	27.757	.7265	0.00	.52	-32.158	.1046
18	8.4368	969.85	0.00	969.85	801.721	724.730	39.745	27.791	.7348	0.00	.56	-30.173	.1033
19	8.4907	977.54	0.00	977.54	808.991	730.653	39.930	27.827	.7384	0.00	.58	-29.761	.1026
20	8.5450	986.70	0.00	986.70	817.540	737.778	40.107	27.864	.7418	0.00	.57	-30.723	.1017
21	8.6000	998.84	0.00	998.84	830.864	749.212	40.285	27.899	.7453	0.00	.52	-33.905	.1003

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3174	0.0	.7829	992.93	42.329	750.765	2.888	.447	.7848	.8138
2	-7.387	.020	0.000	7.387	.3180	0.0	.7800	989.79	42.090	750.981	2.864	.446	.7792	.8088
3	-7.544	.019	0.000	7.544	.3196	0.0	.7768	986.32	41.844	751.193	2.847	.448	.7735	.8037
4	-7.705	.018	0.000	7.706	.3224	0.0	.7733	982.48	41.590	751.395	2.830	.449	.7676	.7985
5	-7.869	.016	0.000	7.869	.3265	0.0	.7694	979.21	41.330	751.589	2.812	.449	.7616	.7931
6	-8.032	.014	0.000	8.032	.3393	0.0	.7591	966.53	40.827	751.774	2.778	.449	.7506	.7832
7	-8.195	.012	0.000	8.195	.3538	0.0	.7459	952.62	40.270	752.021	2.740	.450	.7383	.7719
8	-8.357	.010	0.000	8.357	.3631	0.0	.7333	937.24	39.692	752.376	2.701	.451	.7250	.7599
9	-8.514	.009	0.000	8.514	.3812	0.0	.7205	922.62	39.165	752.725	2.665	.451	.7128	.7487
10	-8.659	.007	0.000	8.659	.3855	0.0	.7138	915.29	38.882	753.661	2.646	.453	.7039	.7407
11	-8.788	.005	0.000	8.788	.3852	0.0	.7062	908.32	38.563	756.744	2.626	.453	.6885	.7269
12	-8.898	.003	0.000	8.898	.3953	0.0	.6979	900.35	38.285	759.381	2.605	.465	.6731	.7131
13	-8.984	.001	0.000	8.984	.3635	0.0	.7020	907.20	38.426	763.188	2.615	.471	.6669	.7078
14	-9.041	-.001	0.000	9.041	.3524	0.0	.7059	913.94	38.571	766.771	2.625	.478	.6601	.7019
15	-9.062	-.004	0.000	9.062	.3344	0.0	.7094	920.14	38.717	770.445	2.635	.485	.6533	.6961
16	-9.059	-.008	0.000	9.059	.3102	0.0	.7179	934.40	39.051	777.452	2.657	.493	.6428	.6864
17	-9.060	-.012	0.000	9.060	.2873	0.0	.7265	951.56	39.397	789.262	2.681	.522	.6201	.6676
18	-9.085	-.018	0.000	9.085	.2637	0.0	.7348	969.85	39.745	801.721	2.704	.546	.5986	.6491
19	-9.126	-.024	0.000	9.126	.2535	0.0	.7384	977.54	39.930	808.991	2.717	.560	.5866	.6387
20	-9.169	-.031	0.000	9.169	.2444	0.0	.7418	986.70	40.107	817.540	2.729	.576	.5725	.6266
21	-9.213	-.038	0.000	9.213	.2361	0.0	.7453	998.84	40.285	830.864	2.741	.602	.5586	.6075

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.708 ISEN. EFF.= .674 POLY. EFF.= .715 DELTA T ON T = .486

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1007.26	0.00	1007.26	750.765	667.222	42.329	27.912	.7955	0.00	0.00	0.000	.1127
2	7.6771	1000.92	0.00	1000.92	750.981	668.430	42.033	27.912	.7898	0.00	-.01	2506.647	.1125
3	7.7155	994.31	0.00	994.31	751.193	669.791	41.844	27.912	.7839	0.00	-.02	1339.762	.1122
4	7.7545	987.42	0.00	987.42	751.395	671.122	41.590	27.911	.7775	0.00	-.03	963.352	.1120
5	7.7943	980.22	0.00	980.22	751.569	672.485	41.333	27.910	.7712	0.00	-.04	787.408	.1118
6	7.8353	965.30	0.00	965.30	751.774	674.968	40.827	27.908	.7555	0.00	-.05	694.431	.1114
7	7.8735	949.34	0.00	949.34	752.021	677.838	40.270	27.907	.7440	0.00	-.05	648.205	.1109
8	7.9245	931.04	0.00	931.04	752.376	680.940	39.632	27.906	.7285	0.00	-.05	636.735	.1104
9	7.9711	915.03	0.00	915.03	752.725	683.821	39.165	27.904	.7140	0.00	-.05	658.867	.1099
10	8.0192	905.19	0.00	905.19	753.661	686.090	38.832	27.903	.7058	0.00	-.05	719.344	.1095
11	8.0683	898.13	0.00	898.13	756.744	690.387	38.533	27.901	.6975	0.00	-.04	836.015	.1089
12	8.1195	889.53	0.00	889.53	759.881	694.805	38.235	27.900	.6837	0.00	-.03	1052.930	.1082
13	8.1715	896.45	0.00	896.45	763.133	697.105	38.425	27.900	.6929	0.00	-.02	1465.221	.1078
14	8.2242	903.01	0.00	903.01	765.771	699.647	38.571	27.899	.6972	0.00	-.02	2333.107	.1074
15	8.2770	910.81	0.00	910.81	770.445	702.262	38.717	27.899	.7015	0.00	-.01	4385.234	.1070
16	8.3302	926.32	0.00	926.32	777.452	706.357	39.051	27.899	.7111	0.00	-.00	36340.532	.1063
17	8.3834	944.34	0.00	944.34	789.252	715.962	39.397	27.899	.7239	0.00	.00	-10932.907	.1050
18	8.4363	963.35	0.00	963.35	801.721	725.524	39.745	27.899	.7305	0.00	.00	-6642.446	.1036
19	8.4935	974.23	0.00	974.23	808.991	731.184	39.930	27.899	.7355	0.00	.00	-6544.692	.1028
20	8.5451	985.06	0.00	985.06	817.540	738.041	40.107	27.899	.7404	0.00	.00	-9844.431	.1018
21	8.6000	998.34	0.00	998.34	830.804	749.212	40.235	27.899	.7433	0.00	0.00	0.000	.1003

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1007.79	0.00	1007.79	750.765	667.133	42.329	27.899	.7960	0.00	0.00	0.000	.1126
2	7.6771	1001.45	0.00	1001.45	750.981	668.402	42.033	27.899	.7903	0.00	-.00	0.000	.1124
3	7.7153	994.53	0.00	994.53	751.193	669.706	41.844	27.899	.7843	0.00	-.00	0.000	.1122
4	7.7545	987.31	0.00	987.31	751.395	671.042	41.593	27.899	.7781	0.00	-.00	0.000	.1120
5	7.7943	980.67	0.00	980.67	751.589	672.413	41.331	27.899	.7716	0.00	-.00	0.000	.1118
6	7.8354	966.20	0.00	966.20	751.774	674.924	40.827	27.899	.7559	0.00	-.00	0.000	.1113
7	7.8735	949.53	0.00	949.53	752.021	677.784	40.271	27.899	.7443	0.00	-.00	0.000	.1109
8	7.9244	931.93	0.00	931.93	752.376	680.896	39.692	27.899	.7257	0.00	-.00	0.000	.1104
9	7.9710	915.25	0.00	915.25	752.725	683.787	39.165	27.899	.7142	0.00	-.00	0.000	.1099
10	8.0192	906.35	0.00	906.35	753.661	686.055	38.832	27.899	.7051	0.00	-.00	0.000	.1095
11	8.0637	898.24	0.00	898.24	756.744	690.371	38.593	27.899	.6975	0.00	-.00	0.000	.1088
12	8.1137	889.59	0.00	889.59	759.881	694.706	38.285	27.899	.6833	0.00	-.00	0.000	.1082
13	8.1717	896.48	0.00	896.48	763.188	697.105	38.425	27.899	.6933	0.00	-.00	0.000	.1078
14	8.2242	903.60	0.00	903.60	766.771	699.648	38.571	27.899	.6972	0.00	-.00	0.000	.1074
15	8.2770	910.79	0.00	910.79	770.445	702.265	38.717	27.899	.7015	0.00	-.00	0.000	.1070
16	8.3301	926.30	0.00	926.30	777.452	706.961	39.051	27.899	.7111	0.00	-.00	0.000	.1063
17	8.3834	944.32	0.00	944.32	789.262	715.966	39.397	27.899	.7293	0.00	-.00	0.000	.1058
18	8.4363	963.33	0.00	963.33	801.721	725.527	39.741	27.899	.7306	0.00	-.00	0.000	.1036
19	8.4938	974.22	0.00	974.22	808.991	731.186	39.930	27.899	.7355	0.00	-.00	0.000	.1028
20	8.5451	985.07	0.00	985.07	817.540	738.041	40.107	27.899	.7404	0.00	-.00	0.000	.1018
21	8.6000	998.34	0.00	998.34	830.804	749.212	40.295	27.899	.7453	0.00	0.00	0.000	.1003

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	1.1817	7.147	5.532	.0854	.4224	.4530	.5401	.7419	.7763	-60.337	-12.647	6.070	10.991
2	6.8619	7.5551	1.2005	6.098	5.771	.0894	.4429	.4524	.5407	.7225	.7697	-61.341	-13.334	6.232	10.694
3	6.9724	7.5231	1.2131	[illegible]	5.411	.0900	.4601	.4584	.5373	.7064	.7629	-61.721	-14.034	6.367	10.31[illegible]
4	7.0833	7.6611	1.2373	[illegible]	6.024	.0915	.4741	.4315	.5303	.6951	.7560	-62.067	-14.729	6.420	9.773
5	7.1930	7.6998	1.25[illegible]	[illegible]	6.032	.0931	.4861	.4424	.5221	.681[illegible]	.7[illegible]1	-62.371	-15.439	6.322	9.077
6	7.3022	7.7394	1.2735	5.216	6.136	.0947	.4959	.5112	.5114	.6724	.7420	-62.545	-16.169	6.039	8.316
7	7.4111	7.7795	1.2912	5.132	5.110	.0960	.5047	.5091	.4993	.6645	.7351	-62.915	-16.893	5.566	7.656
8	7.5137	7.8210	1.3097	5.055	6.141	.1042	.5134	.5169	.4839	.6503	.7285	-63.181	-17.594	4.912	7.153
9	7.6243	7.8632	1.3254	5.312	6.233	.1103	.5205	.5232	.4715	.6435	.7218	-63.453	-18.222	4.071	6.801
10	7.7369	7.9054	1.3427	5.370	6.250	.1222	.5295	.5317	.4555	.6405	.7165	-63.736	-18.801	3.063	6.648
11	7.8458	7.9512	1.3592	5.335	6.237	.1543	.5506	.5516	.4409	.6220	.7161	-64.036	-19.329	1.925	6.734
12	7.9551	7.9962	1.3755	5.406	6.302	.1646	.5704	.5709	.4252	.6039	.7191	-64.355	-19.615	.702	7.064
13	8.0651	8.0375	1.3916	5.550	6.456	.2141	.5899	.5897	.4093	.5838	.7201	-64.699	-20.259	-.632	7.652
14	8.1760	8.0994	1.4074	5.557	6.715	.2436	.6099	.6191	.3940	.5672	.7214	-65.070	-20.661	-2.105	8.505
15	8.2881	8.1543	1.4223	5.836	7.111	.2716	.6295	.6280	.3787	.5407	.7224	-65.471	-21.024	-3.693	9.571
16	8.4016	8.2130	1.4333	5.524	7.232	.3122	.6521	.6501	.3541	.5195	.7321	-65.904	-21.345	-5.213	10.770
17	8.5168	8.2779	1.4535	5.320	7.357	.3639	.7152	.7130	.3507	.4704	.7533	-66.362	-21.615	-6.359	12.018
18	8.6341	8.3528	1.4655	5.329	8.319	.4224	.7772	.7741	.3344	.4143	.7747	-66.836	-21.819	-7.054	13.189
19	8.7536	8.4353	1.4640	5.547	10.296	.4479	.8087	.8093	.3312	.3834	.7737	-67.319	-21.883	-7.707	13.895
20	8.8756	8.5379	1.4999	5.654	14.029	.4774	.8500	.8464	.3234	.3426	.7834	-67.811	-21.690	-8.555	13.834
21	9.0000	8.6699	1.5105	5.807	25.421	.5255	.9321	.9267	.3214	.2619	.7939	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5199	7.5400	1.1633	-.044	7.239	.3174	.4397	.4395	.2025	.7153	0.0000	48.617	-7.239	-39.941	.020
2	7.6672	7.5774	1.1310	-.213	7.337	.3130	.4544	.4543	.2146	.7046	0.0000	47.904	-7.387	-37.330	.020
3	7.7136	7.7159	1.1907	-.390	7.544	.3136	.4683	.4583	.2243	.6948	0.0000	47.011	-7.544	-34.482	.019
4	7.7586	7.7553	1.2093	-.570	7.706	.3224	.4806	.4406	.2322	.6865	0.0000	46.355	-7.705	-31.483	.018
5	7.8022	7.7958	1.2109	-1.000	7.959	.3265	.4910	.4911	.2363	.6800	0.0000	45.906	-7.869	-28.394	.016
6	7.8447	7.8376	1.2215	-1.125	8.032	.3393	.5049	.5150	.2393	.6698	0.0000	45.499	-8.032	-25.267	.014
7	7.8865	7.8898	1.2227	-1.106	8.195	.3538	.5188	.5189	.2404	.6595	0.0000	45.190	-8.195	-22.159	.012
8	7.9278	7.9257	1.2207	-.937	8.357	.3681	.5324	.5324	.2410	.6495	0.0000	44.935	-8.357	-19.111	.010
9	7.9683	7.9723	1.2103	-.673	8.514	.3812	.5445	.5444	.2409	.6409	0.0000	44.731	-8.514	-16.036	.009
10	8.0099	8.0203	1.2105	-.603	8.659	.3822	.5509	.5505	.2408	.6379	0.0000	44.584	-8.653	-12.773	.007
11	8.0513	8.0697	1.1995	.210	8.738	.3852	.5576	.5574	.2426	.6362	0.0000	44.499	-8.783	-9.163	.005
12	8.0933	8.1205	1.1878	.934	8.835	.3353	.5642	.5536	.2444	.6342	0.0000	44.499	-8.895	-5.322	.003
13	8.1362	8.1723	1.1750	1.742	8.934	.3695	.5545	.5590	.2464	.6431	0.0000	44.523	-8.984	-1.571	.001
14	8.1800	8.2245	1.1611	2.405	9.041	.3524	.5539	.5534	.2486	.6524	0.0000	44.497	-9.041	1.824	-.001
15	8.2243	8.2772	1.1463	3.182	9.062	.3344	.5474	.5465	.2508	.6620	0.0000	45.266	-9.062	5.267	-.004
16	8.2714	8.3302	1.1313	4.059	9.059	.3102	.5378	.5370	.2520	.6762	0.0000	45.643	-9.059	9.614	-.008
17	8.3210	8.3834	1.1159	7.440	9.060	.2873	.5296	.5289	.2509	.6912	0.0000	45.985	-9.060	15.726	-.012
18	8.3756	8.4364	1.0954	10.708	9.085	.2537	.5183	.5174	.2460	.7037	0.0000	46.517	-9.085	23.406	-.018
19	8.4307	8.4907	1.0722	12.629	9.126	.2535	.5032	.5025	.2343	.7243	0.0000	47.539	-9.126	31.620	-.024
20	8.5084	8.5450	1.0385	15.737	9.159	.2444	.4805	.4400	.2132	.7405	0.0000	48.353	-9.159	39.451	-.031
21	8.6199	8.6000	.9790	25.682	9.213	.2301	.4376	.4381	.1653	.7875	0.0000	50.314	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.0	0.0	3.0	13.0	15.0	17.0	25.2	25.9	25.9
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.0	0.0	3.0	13.0	13.0	17.0	25.2	25.9	25.9

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 301231615700

FLOW = 25.63 SPEED = 20410.0 PRESSURE RATIO = 2.708 ISENTROPIC EFFY = .6735 POLYTROPIC EFFY = .7149 DEL T/T = .4861

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301231615700	CONVERGED AFTER 25 PASSES	25.633	20410.0	3.328	.839	2.708	.674	.67163

10. TEST POINT 301240915602 (102%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0686	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	20.93	0.000	.0723
2	6.2258	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	19.73	0.000	.0723
3	6.3837	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	18.50	0.000	.0723
4	6.5393	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	17.27	0.000	.0723
5	6.6936	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	16.03	0.000	.0723
6	6.8473	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	14.79	0.000	.0723
7	6.9999	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	13.55	0.000	.0723
8	7.1519	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	12.32	0.000	.0723
9	7.3027	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	11.10	0.000	.0723
10	7.4532	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	9.90	0.000	.0723
11	7.6031	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	8.73	0.000	.0723
12	7.7527	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	7.58	0.000	.0723
13	7.9016	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	6.49	0.000	.0723
14	8.0507	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	5.42	0.000	.0723
15	8.1994	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	4.41	0.000	.0723
16	8.3490	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	3.46	0.000	.0723
17	8.4954	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	2.58	0.000	.0723
18	8.6448	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	1.79	0.000	.0723
19	8.7932	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	1.08	0.000	.0723
20	8.9416	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	.48	0.000	.0723
21	9.0900	369.42	0.00	369.42	518.688	507.342	14.696	13.602	.3343	0.00	0.00	0.000	.0723

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	403.91	0.00	403.91	518.688	505.124	14.696	13.395	.3663	0.00	20.83	-205.758	.0715
2	6.5137	406.21	0.00	406.21	518.688	504.969	14.696	13.381	.3684	0.00	19.54	-113.430	.0714
3	6.6514	408.24	0.00	408.24	518.688	504.831	14.696	13.368	.3703	0.00	18.25	-81.424	.0714
4	6.7880	410.00	0.00	410.00	518.688	504.712	14.696	13.357	.3720	0.00	16.95	-65.087	.0713
5	6.9237	411.48	0.00	411.48	518.688	504.611	14.696	13.347	.3733	0.00	15.65	-55.082	.0713
6	7.0595	412.58	0.00	412.58	518.688	504.529	14.696	13.340	.3745	0.00	14.36	-48.216	.0713
7	7.1927	413.59	0.00	413.59	518.688	504.466	14.696	13.334	.3753	0.00	13.07	-43.098	.0712
8	7.3264	414.19	0.00	414.19	518.688	504.424	14.696	13.330	.3759	0.00	11.80	-39.022	.0712
9	7.4597	414.49	0.00	414.49	518.688	504.404	14.696	13.328	.3761	0.00	10.53	-35.595	.0712
10	7.5929	414.45	0.00	414.45	518.688	504.407	14.696	13.328	.3761	0.00	9.2[illegible]	-32.588	.0712
11	7.7250	414.07	0.00	414.07	518.688	504.433	14.696	13.331	.3758	0.00	8.05	-29.868	.0712
12	7.8592	413.33	0.00	413.33	518.688	504.484	14.696	13.336	.3751	0.00	6.85	-27.354	.0712
13	7.9927	412.21	0.00	412.21	518.688	504.561	14.696	13.343	.3740	0.00	5.67	-25.001	.0713
14	8.1265	410.69	0.00	410.69	518.688	504.665	14.696	13.352	.3726	0.00	4.53	-22.782	.0713
15	8.2611	408.75	0.00	408.75	518.688	504.797	14.696	13.365	.3709	0.00	3.44	-20.686	.0714
16	8.3963	406.37	0.00	406.37	518.688	504.958	14.696	13.380	.3685	0.00	2.39	-18.705	.0714
17	8.5325	403.53	0.00	403.53	518.688	505.150	14.696	13.397	.3659	0.00	1.39	-16.837	.0715
18	8.6697	400.18	0.00	400.18	518.688	505.373	14.696	13.418	.3629	0.00	.46	-15.084	.0716
19	8.8083	396.31	0.00	396.31	518.688	505.630	14.696	13.442	.3592	0.00	-.41	-13.444	.0716
20	8.9483	391.85	0.00	391.85	518.688	505.922	14.696	13.469	.3551	0.00	-1.20	-11.921	.0718
21	9.0900	386.75	0.00	386.75	518.688	506.252	14.696	13.500	.3503	0.00	-1.91	-10.518	.0719

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6015	447.50	0.00	447.50	518.688	502.016	14.696	13.109	.4073	0.00	20.54	-83.031	.0704
2	6.7244	451.07	0.00	451.07	518.688	501.771	14.696	13.086	.4104	0.00	19.14	-72.443	.0703
3	6.8432	454.05	0.00	454.05	518.688	501.546	14.696	13.066	.4132	0.00	17.74	-62.194	.0702
4	6.9572	456.71	0.00	456.71	518.688	501.345	14.696	13.048	.4157	0.00	16.35	-53.904	.0701
5	7.0876	458.39	0.00	458.39	518.688	501.171	14.696	13.032	.4179	0.00	14.96	-47.250	.0701
6	7.2074	460.39	0.00	460.39	518.688	501.027	14.696	13.019	.4197	0.00	13.58	-41.718	.0700
7	7.3298	462.36	0.00	462.36	518.688	500.913	14.696	13.008	.4210	0.00	12.20	-35.977	.0700
8	7.4453	463.39	0.00	463.39	518.688	500.834	14.696	13.001	.4220	0.00	10.83	-32.817	.0700
9	7.5650	463.33	0.00	463.33	518.688	500.793	14.696	12.997	.4225	0.00	9.46	-29.132	.0699
10	7.6842	463.35	0.00	463.35	518.688	500.791	14.696	12.997	.4225	0.00	8.10	-25.977	.0699
11	7.8035	463.41	0.00	463.41	518.688	500.832	14.696	13.001	.4220	0.00	6.75	-23.045	.0700
12	7.9234	462.29	0.00	462.29	518.688	500.919	14.696	13.009	.4210	0.00	5.41	-20.539	.0700
13	8.0437	460.55	0.00	460.55	518.688	501.053	14.696	13.021	.4193	0.00	4.09	-18.500	.0700
14	8.1543	458.17	0.00	458.17	518.688	501.234	14.696	13.038	.4171	0.00	2.79	-16.702	.0701
15	8.2553	455.15	0.00	455.15	518.688	501.463	14.696	13.058	.4143	0.00	1.52	-15.150	.0702
16	8.4131	451.48	0.00	451.48	518.688	501.740	14.696	13.084	.4109	0.00	.28	-13.802	.0703
17	8.5346	447.14	0.00	447.14	518.688	502.064	14.696	13.113	.4067	0.00	-.93	-12.613	.0704
18	8.6505	442.14	0.00	442.14	518.688	502.434	14.696	13.147	.4020	0.00	-2.11	-11.549	.0705
19	8.7834	436.45	0.00	436.45	518.688	502.850	14.696	13.185	.3967	0.00	-3.26	-10.557	.0707
20	8.9191	430.04	0.00	430.04	518.688	503.312	14.696	13.228	.3907	0.00	-4.38	-9.613	.0708
21	9.0530	422.82	0.00	422.82	518.688	503.824	14.696	13.273	.3839	0.00	-5.47	-8.690	.0710

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7503	497.39	0.00	497.39	518.688	498.076	14.696	12.752	.4547	0.00	20.32	-384.054	.0690
2	6.8615	502.63	0.00	502.63	518.688	497.676	14.696	12.717	.4592	0.00	18.82	-112.153	.0689
3	6.9724	506.73	0.00	506.73	518.688	497.337	14.696	12.687	.4631	0.00	17.36	-82.791	.0688
4	7.0827	510.22	0.00	510.22	518.688	497.042	14.696	12.660	.4664	0.00	15.91	-74.060	.0686
5	7.1921	513.26	0.00	513.26	518.688	496.764	14.696	12.637	.4693	0.00	14.48	-63.699	.0686
6	7.3014	515.47	0.00	515.47	518.688	496.561	14.696	12.617	.4714	0.00	13.04	-64.200	.0685
7	7.4174	518.02	0.00	518.02	518.688	496.375	14.696	12.601	.4739	0.00	11.60	-56.139	.0684
8	7.5132	519.35	0.00	519.35	518.688	496.235	14.696	12.588	.4754	0.00	10.13	-46.969	.0684
9	7.6231	520.63	0.00	520.63	518.688	496.146	14.696	12.581	.4764	0.00	8.66	-39.323	.0683
10	7.7371	521.01	0.00	521.01	518.688	496.110	14.696	12.578	.4767	0.00	7.16	-30.881	.0683
11	7.8455	520.58	0.00	520.58	518.688	496.154	14.696	12.581	.4763	0.00	5.66	-25.252	.0683
12	7.9563	519.32	0.00	519.32	518.688	496.263	14.696	12.591	.4751	0.00	4.17	-21.200	.0684
13	8.0663	517.22	0.00	517.22	518.688	496.444	14.696	12.607	.4731	0.00	2.66	-19.125	.0684
14	8.1744	514.27	0.00	514.27	518.688	496.697	14.696	12.629	.4703	0.00	1.21	-15.772	.0685
15	8.2933	510.43	0.00	510.43	518.688	497.020	14.696	12.658	.4667	0.00	-.25	-13.967	.0686
16	8.4043	505.88	0.00	505.88	518.688	497.409	14.696	12.693	.4623	0.00	-1.67	-12.617	.0688
17	8.5231	500.57	0.00	500.57	518.688	497.853	14.696	12.733	.4572	0.00	-3.05	-11.716	.0689
18	8.6372	494.69	0.00	494.69	518.688	498.341	14.696	12.776	.4515	0.00	-4.38	-11.133	.0691
19	8.7560	488.33	0.00	488.33	518.688	498.860	14.696	12.823	.4450	0.00	-5.68	-10.828	.0693
20	8.8763	481.53	0.00	481.53	518.688	499.409	14.696	12.872	.4382	0.00	-6.98	-10.478	.0695
21	9.0093	474.34	0.00	474.34	518.688	499.980	14.696	12.924	.4324	0.00	-8.25	-10.317	.0697

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NU	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-63.337	6.070	-67.366	6.929	0.0000	1224.1	1.2068	1321.49	31.210	642.395	1.000	0.000	1.0000	1.0000
2	-61.354	6.231	-65.003	6.649	0.0000	1244.3	1.2261	1342.05	31.921	647.128	1.000	0.000	1.0000	1.0000
3	-61.740	6.257	-68.161	6.421	0.0000	1264.4	1.2449	1362.19	32.550	651.290	1.000	0.000	1.0000	1.0000
4	-62.087	6.420	-68.335	6.248	0.0000	1284.4	1.2634	1367.04	33.398	655.506	1.000	0.000	1.0000	1.0000
5	-62.390	6.324	-68.520	6.130	0.0000	1304.3	1.2817	1401.64	34.157	659.761	1.000	0.000	1.0000	1.0000
6	-62.664	6.042	-68.714	6.050	0.0000	1324.1	1.2997	1421.04	34.958	664.065	1.000	0.000	1.0000	1.0000
7	-62.926	5.572	-68.920	.993	0.0000	1343.9	1.3175	1440.25	35.772	668.424	1.000	0.000	1.0000	1.0000
8	-63.189	4.916	-69.139	5.950	0.0000	1363.6	1.3351	1459.27	36.611	672.940	1.000	0.000	1.0000	1.0000
9	-63.458	4.072	-69.374	5.916	0.0000	1383.4	1.3524	1479.10	37.477	677.320	1.000	0.000	1.0000	1.0000
10	-63.740	3.030	-69.529	5.859	0.0000	1403.1	1.3695	1496.74	38.371	681.869	1.000	0.000	1.0000	1.0000
11	-64.033	1.920	-69.305	5.867	0.0000	1423.0	1.3854	1515.13	39.296	686.496	1.000	0.000	1.0000	1.0000
12	-64.359	.038	-70.205	5.843	0.0000	1442.9	1.4030	1533.49	40.255	691.208	1.000	0.000	1.0000	1.0000
13	-64.702	-.634	-70.529	5.827	0.0000	1462.9	1.4193	1551.07	41.251	696.015	1.000	0.000	1.0000	1.0000
14	-65.075	-2.138	-70.379	5.802	0.0000	1483.1	1.4355	1569.77	42.237	700.927	1.000	0.000	1.0000	1.0000
15	-65.479	-3.733	-71.247	5.765	0.0000	1503.6	1.4510	1587.85	43.366	705.959	1.000	0.000	1.0000	1.0000
16	-65.915	-5.252	-71.539	5.724	0.0000	1524.2	1.4576	1605.96	44.434	711.107	1.000	0.000	1.0000	1.0000
17	-66.378	-5.333	-72.049	5.672	0.0000	1545.1	1.4836	1624.19	45.673	716.398	1.000	0.000	1.0000	1.0000
18	-66.856	-7.075	-72.473	5.617	0.0000	1565.3	1.4997	1642.51	46.910	721.838	1.000	0.000	1.0000	1.0000
19	-67.340	-7.722	-72.906	5.565	0.0000	1587.9	1.5159	1661.30	48.208	727.437	1.000	0.000	1.0000	1.0000
20	-67.825	-8.555	-73.347	5.521	0.0000	1609.9	1.5325	1680.30	49.573	733.207	1.000	0.000	1.0000	1.0000
21	-58.316	-9.637	-73.795	5.479	0.0000	1632.1	1.5492	1699.68	51.010	739.159	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8379	565.66	138.82	582.44	547.548	519.359	17.622	14.546	.5209	13.79	22.32	6.199	.0768
2	6.9971	565.07	133.54	581.22	546.850	518.779	17.532	14.579	.5201	13.28	20.64	6.434	.0757
3	7.0963	565.33	128.87	580.42	546.251	518.256	17.452	14.517	.5197	12.83	18.93	7.126	.0755
4	7.1953	565.53	125.02	580.25	545.800	517.920	17.393	14.464	.5197	12.44	17.17	9.541	.0753
5	7.2941	567.79	122.08	580.75	545.525	517.498	17.345	14.422	.5204	12.13	15.35	11.477	.0751
6	7.3927	569.15	120.05	581.67	545.436	517.320	17.324	14.394	.5213	11.91	13.47	13.201	.0750
7	7.4913	570.38	119.02	582.66	545.560	517.348	17.322	14.384	.5221	11.79	11.56	74.959	.0749
8	7.5899	571.03	118.23	583.33	545.958	517.680	17.339	14.393	.5225	11.79	9.56	-35.755	.0749
9	7.6808	571.13	120.17	583.63	546.529	518.223	17.374	14.423	.5229	11.88	7.54	-14.122	.0750
10	7.7849	570.46	121.83	583.33	547.285	519.009	17.423	14.475	.5213	12.06	5.48	-8.770	.0752
11	7.8829	568.23	125.75	581.33	548.565	520.421	17.434	14.549	.5203	12.48	3.42	-5.331	.0753
12	7.9817	565.07	130.03	579.34	549.967	522.031	17.575	14.644	.5173	12.96	1.37	-5.081	.0756
13	8.0812	560.90	134.72	576.83	551.497	523.850	17.671	14.760	.5137	13.51	-.63	-4.279	.0759
14	8.1617	555.59	139.35	572.95	553.196	525.923	17.775	14.893	.5033	14.14	-2.57	-3.763	.0763
15	8.2835	549.35	145.22	568.22	554.939	528.116	17.881	15.040	.5040	14.81	-4.43	-3.434	.0768
16	8.3858	542.03	151.25	562.74	556.915	530.609	18.003	15.197	.4980	15.59	-6.15	-3.245	.0772
17	8.4920	533.65	158.75	556.77	559.310	533.561	18.114	15.358	.4913	16.57	-7.67	-3.197	.0776
18	8.5933	525.08	165.36	550.65	551.665	536.480	18.213	15.515	.4849	17.53	-8.90	-3.350	.0779
19	8.7037	517.34	169.59	544.43	553.190	538.573	18.307	15.654	.4792	18.15	-9.74	-3.910	.0783
20	8.8232	509.25	172.92	537.52	554.406	540.410	18.344	15.755	.4714	18.66	-10.05	-5.917	.0786
21	8.9346	499.30	173.21	529.05	555.315	542.070	18.292	15.732	.4632	19.11	-9.38	-1665.683	.0785

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	LEAV	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.943	4.253	-63.041	4.092	.0139	1250.9	1.1159	1247.70	31.903	646.487	1.199	.056	.9570	.9581
2	-59.444	4.230	-63.317	4.072	.0147	1268.9	1.1352	1268.43	32.534	652.237	1.193	.054	.9522	.9533
3	-59.974	4.079	-63.395	4.051	.0156	1286.9	1.1540	1288.92	33.133	656.038	1.166	.053	.9472	.9485
4	-60.316	3.723	-64.347	4.031	.0165	1304.9	1.1724	1308.86	33.345	659.386	1.153	.052	.9423	.9436
5	-60.651	3.247	-64.692	4.011	.0174	1322.8	1.1901	1328.13	34.531	663.779	1.130	.052	.9375	.9390
6	-61.007	2.927	-65.201	3.995	.0182	1340.7	1.2069	1346.76	35.231	667.712	1.179	.052	.9331	.9347
7	-61.306	2.556	-65.239	[illegible]	.0194	1358.5	1.2227	1364.39	35.942	671.585	1.179	.052	.9281	.9297
8	-61.591	2.243	-65.359	3.973	.0216	1376.3	1.2368	1380.65	36.545	675.701	1.180	.053	.9199	.9217
9	-61.859	1.956	-65.551	3.992	.0236	1394.0	1.2500	1396.01	37.358	679.763	1.182	.054	.9127	.9147
10	-62.145	1.437	-66.142	3.997	.0278	1411.8	1.2619	1410.39	38.105	683.577	1.186	.055	.9055	.9078
11	-62.425	.989	-66.431	4.025	.0319	1429.5	1.2708	1422.26	38.760	688.053	1.190	.058	.8863	.8891
12	-62.714	.546	-66.735	4.071	.0376	1447.5	1.2789	1433.52	39.441	692.305	1.196	.060	.8698	.8731
13	-63.019	.093	-67.106	4.127	.0432	1465.5	1.2862	1444.18	40.146	696.542	1.202	.063	.8550	.8587
14	-63.347	-.412	-67.537	4.191	.0493	1483.8	1.2925	1454.12	40.855	701.076	1.210	.067	.8398	.8448
15	-63.707	-.951	-67.960	4.253	.0551	1502.2	1.2985	1463.95	41.601	705.519	1.217	.070	.8266	.8314
16	-64.103	-1.472	-68.410	4.306	.0626	1520.9	1.3035	1473.03	42.322	710.288	1.225	.074	.8099	.8153
17	-64.535	-1.700	-68.876	4.340	.0735	1540.0	1.3065	1480.77	42.959	715.100	1.233	.079	.7859	.7922
18	-65.003	-1.822	-69.455	4.352	.0842	1559.5	1.3107	1489.29	43.531	720.070	1.240	.083	.7640	.7711
19	-65.511	-1.936	-69.943	4.337	.0892	1579.3	1.3191	1501.67	44.523	725.200	1.246	.086	.7549	.7624
20	-66.068	-2.447	-70.367	4.299	.0951	1599.5	1.3291	1515.63	45.435	730.489	1.248	.088	.7417	.7497
21	-66.594	-3.111	-70.941	4.247	.1051	1620.2	1.3404	1530.89	46.230	735.957	1.244	.090	.7158	.7245

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.205 ISEN. EFF.= .845 POLY. EFF.= .849 DELTA T ON T = .065

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0734	558.60	395.55	684.04	603.060	564.175	24.532	19.420	.5877	35.32	24.47	66.453	.0928
2	7.1630	561.09	392.93	685.51	603.443	564.461	24.553	19.427	.5883	34.98	22.66	87.367	.0928
3	7.2457	564.31	390.20	686.57	603.834	564.729	24.574	19.433	.5890	34.63	20.74	93.958	.0927
4	7.3293	568.42	387.57	687.38	604.227	564.963	24.595	19.433	.5901	34.29	18.72	73.964	.0927
5	7.4117	572.27	384.95	689.71	604.600	565.140	24.613	19.427	.5915	33.93	16.63	48.379	.0926
6	7.4930	576.46	382.27	691.09	604.937	565.248	24.625	19.411	.5932	33.55	14.47	30.929	.0926
7	7.5737	580.79	379.82	693.95	605.308	565.359	24.632	19.388	.5951	33.18	12.27	20.607	.0924
8	7.6540	584.54	378.15	696.13	605.639	565.534	24.627	19.358	.5968	32.90	10.04	14.497	.0922
9	7.7340	588.07	375.00	697.39	606.247	565.834	24.605	19.319	.5983	32.59	7.80	10.758	.0920
10	7.8139	590.91	373.35	699.39	606.537	566.008	24.560	19.271	.5990	32.29	5.54	8.378	.0918
11	7.8942	591.56	373.75	698.38	607.528	567.003	24.475	19.214	.5985	32.33	3.30	6.816	.0913
12	7.9735	589.21	372.39	697.23	608.232	567.904	24.355	19.148	.5955	32.33	1.10	5.778	.0909
13	8.0531	585.08	370.97	693.52	608.693	568.738	24.137	19.070	.5930	32.33	-1.05	5.087	.0904
14	8.1424	580.45	368.63	687.52	609.060	569.845	23.935	19.001	.5873	32.42	-3.14	4.641	.0899
15	8.2230	572.31	364.59	678.73	609.095	570.987	23.752	18.925	.5792	32.52	-5.15	4.390	.0893
16	8.3145	559.78	361.50	666.53	609.370	572.772	23.463	18.853	.5690	32.88	-7.02	4.317	.0888
17	8.4124	540.54	361.44	650.33	610.234	575.160	23.125	18.791	.5529	33.76	-8.66	4.436	.0881
18	8.5119	515.00	359.11	627.54	610.720	578.032	22.731	18.742	.5325	34.89	-9.94	4.847	.0874
19	8.6187	483.44	347.73	595.86	608.936	579.493	22.265	18.712	.5047	35.71	-10.73	5.918	.0870
20	8.7351	441.16	335.05	553.99	606.815	581.366	21.733	18.705	.4545	37.22	-10.79	9.566	.0867
21	8.8679	374.28	322.62	494.14	604.835	584.588	21.101	18.726	.4167	40.76	-9.38	1665.883	.0863

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.458	-57.422	5.318	.0280	1283.7	.3004	1048.93	32.854	655.349	1.669	.163	.9683	.9705
2	-53.071	2.239	-58.204	5.133	.0298	1299.0	.9148	1066.04	33.349	658.625	1.671	.163	.9656	.9680
3	-53.612	1.920	-58.559	4.947	.0315	1314.2	.9292	1083.00	33.931	661.905	1.672	.164	.9629	.9655
4	-54.119	1.275	-58.853	4.764	.0332	1329.2	.9435	1099.91	34.478	665.189	1.674	.165	.9602	.9630
5	-54.590	.437	-59.178	4.588	.0349	1344.1	.9579	1116.91	35.031	668.478	1.675	.166	.9575	.9605
6	-55.022	-.067	-59.447	4.425	.0366	1358.9	.9725	1134.04	35.590	671.772	1.676	.166	.9547	.9579
7	-55.413	-.282	-59.694	4.281	.0388	1373.5	.9869	1150.96	36.143	675.075	1.676	.167	.9512	.9544
8	-55.771	-.320	-59.937	4.166	.0431	1388.0	1.0003	1166.86	36.652	678.394	1.676	.168	.9450	.9488
9	-56.103	-.259	-60.194	4.090	.0471	1402.5	1.0140	1183.06	37.172	681.736	1.674	.169	.9389	.9431
10	-56.414	-.222	-60.482	4.068	.0515	1417.0	1.0278	1199.33	37.689	685.110	1.671	.159	.9321	.9368
11	-56.708	-.036	-60.823	4.115	.0637	1431.6	1.0374	1211.58	38.009	688.537	1.666	.171	.9151	.9210
12	-56.990	.139	-61.238	4.248	.0751	1446.4	1.0477	1224.54	38.349	692.038	1.657	.173	.8985	.9055
13	-57.268	.468	-61.742	4.474	.0864	1461.3	1.0583	1237.90	38.697	695.631	1.646	.174	.8814	.8895
14	-57.552	.891	-62.351	4.799	.0983	1476.6	1.0684	1250.84	39.018	699.336	1.633	.174	.8631	.8713
15	-57.555	1.362	-63.087	5.232	.1107	1492.3	1.0790	1264.38	39.368	703.181	1.616	.174	.8426	.8520
16	-58.195	1.903	-63.380	5.786	.1261	1508.6	1.0874	1276.05	39.628	707.200	1.597	.175	.8178	.8292
17	-58.396	2.528	-65.099	6.493	.1433	1525.6	1.0913	1283.56	39.684	711.454	1.574	.176	.7827	.7961
18	-59.085	3.328	-66.502	7.417	.1700	1543.6	1.0954	1291.63	39.785	716.019	1.547	.177	.7471	.7621
19	-59.691	4.149	-68.290	8.599	.1800	1563.0	1.1079	1305.00	40.342	720.374	1.515	.174	.7235	.7392
20	-60.472	4.635	-70.547	10.375	.1914	1584.1	2.1203	1324.67	40.952	726.446	1.479	.170	.6958	.7121
21	-61.540	4.918	-73.768	12.227	.2102	1608.2	1.1292	1338.94	41.463	732.773	1.436	.166	.6550	.6720

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.620 ISEN. EFF.= .866 POLY. EFF.= .875 DELTA T ON T = .178

STATION 7 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	657.29	605.83	893.93	651.052	584.855	31.875	21.875	.7537	42.67	24.67	59.510	.1008
2	7.3312	663.81	598.70	893.91	650.730	584.534	31.753	21.788	.7539	42.05	22.70	-123.256	.1005
3	7.3993	669.22	592.82	894.03	650.647	584.435	31.673	21.729	.7541	41.54	20.54	-36.181	.1002
4	7.4655	673.55	587.51	894.06	650.744	584.526	31.621	21.694	.7541	41.11	18.38	-23.558	.1000
5	7.5330	677.13	583.80	894.05	550.989	584.774	31.593	21.678	.7539	40.77	16.24	-18.709	.0999
6	7.5991	680.04	580.40	894.04	651.371	585.158	31.587	21.679	.7536	40.48	14.14	-16.538	.0999
7	7.6649	682.21	578.24	894.30	652.020	585.771	31.606	21.696	.7535	40.28	12.08	-15.464	.0998
8	7.7306	682.71	578.29	894.70	653.168	586.863	31.644	21.729	.7531	40.27	10.07	-15.086	.0998
9	7.7954	682.65	575.69	894.92	654.403	588.069	31.696	21.778	.7525	40.29	8.11	-15.268	.0998
10	7.8624	531.50	579.55	894.61	655.754	589.471	31.752	21.840	.7514	40.38	6.19	-15.963	.0999
11	7.9231	674.35	586.40	893.65	658.542	592.409	31.781	21.915	.7487	41.01	4.32	-17.210	.0997
12	7.9971	665.92	592.70	891.43	661.248	595.444	31.797	22.003	.7450	41.67	2.49	-19.224	.0996
13	8.0665	655.73	595.57	887.52	663.902	595.676	31.787	22.103	.7398	42.40	.69	-22.488	.0995
14	8.1379	641.41	604.87	881.64	666.718	602.379	31.735	22.217	.7326	43.32	-1.08	-27.907	.0994
15	8.2114	624.30	609.65	872.53	669.228	606.212	31.623	22.343	.7228	44.32	-2.81	-38.406	.0993
16	8.2883	600.22	615.39	860.35	672.308	611.060	31.452	22.482	.7099	45.76	-4.51	-54.504	.0992
17	8.3701	564.72	628.98	845.30	676.975	617.869	31.211	22.636	.6936	48.08	-6.09	-215.954	.0987
18	8.4591	520.69	633.29	824.50	681.263	625.045	30.873	22.805	.6727	50.84	-7.45	143.993	.0983
19	8.5571	474.45	632.02	790.23	681.277	629.634	30.333	22.985	.6425	53.10	-8.55	59.230	.0984
20	8.6677	414.25	622.88	748.06	650.998	634.733	29.685	23.176	.6057	56.37	-9.35	53.878	.0986
21	8.8019	321.46	617.36	696.03	682.044	641.999	28.933	23.389	.5604	62.49	-9.37	************	.0982

BLADE DATA

LOCAT-ION	BLA.-ANGLES- SECTION	CAT	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.429	1.212	-47.[illegible]	5.324	.0422	1317.0	.9165	959.33	33.841	652.507	2.169	.235	.9682	.9715
2	-41.343	1.235	-47.[illegible]	6.457	.0449	1329.5	.9327	987.25	34.317	655.251	2.161	.235	.9653	.9688
3	-41.711	.933	-48.221	6.510	.0474	1341.9	.9472	1004.44	34.741	667.377	2.155	.234	.9623	.9662
4	-41.124	.137	-46.573	5.354	.0530	1354.0	.9604	1020.13	35.165	670.692	2.152	.235	.9593	.9635
5	-42.320	-.015	-43.172	3.262	.0525	1366.1	.9725	1034.65	35.599	673.404	2.150	.235	.9563	.9608
6	-43.440	-1.116	-49.[illegible]	3.357	.0510	1378.1	.9836	1049.23	36.015	676.171	2.149	.236	.9533	.9580
7	-44.333	-1.240	-49.057	[illegible]	.0533	1390.0	.9934	1060.38	36.425	678.348	2.151	.237	.9435	.9546
8	-44.533	-1.037	-50.140	3.413	[illegible]	1401.3	.9005	1069.82	36.763	681.595	2.153	.249	.9430	.9488
9	-45.201	-.744	-53.730	3.734	.0709	1413.9	.9071	1073.69	37.107	684.368	2.157	.252	.9366	.9431
10	-45.443	-.233	-51.150	2.713	.0773	1425.8	.9126	1085.50	37.439	687.174	2.161	.264	.9297	.9369
11	-45.357	.333	-51.[illegible]	2.7[illegible]	.0929	1437.9	.9131	1093.22	37.453	690.035	2.163	.270	.9123	.9213
12	-46.279	1.317	-52.170	3.311	.1175	1450.3	.9074	1095.76	37.503	692.372	2.164	.275	.8956	.9063
13	-45.584	1.937	-52.325	3.141	.1295	1462.3	.9041	1094.70	37.537	695.397	2.163	.280	.8788	.8911
14	-47.188	2.349	-53.[illegible]	[illegible]	.1462	1475.8	.8988	1091.61	37.512	699.131	2.159	.285	.8600	.8742
15	-47.500	4.121	-54.[illegible]	7.132	.1659	1489.1	.8934	1079.55	37.505	702.397	2.152	.290	.8415	.8575
16	-47.927	5.495	-55.305	7.975	.1888	1503.1	.8934	1070.74	37.337	705.937	2.140	.295	.8179	.8361
17	-48.432	5.752	-57.573	9.171	.2221	1517.3	.8642	1053.15	36.331	709.531	2.124	.305	.7948	.8061
18	-48.852	8.146	-59.391	11.552	.2545	1534.1	.8446	1035.23	36.336	713.589	2.101	.313	.7517	.7760
19	-49.595	9.415	-62.715	13.129	.2696	1551.8	.8414	1034.97	36.519	718.110	2.064	.313	.7318	.7574
20	-50.353	10.330	-65.415	15.365	.2963	1571.3	.8384	1035.47	36.710	723.269	2.020	.313	.7090	.7360
21	-51.351	13.430	-71.370	20.459	.3153	1595.2	.8296	1030.30	36.711	729.516	1.969	.315	.6765	.7054

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.131 ISEN. EFF.= .851 POLY. EFF.= .875 DELTA T ON T = .280

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.44	924.70	711.71	1166.33	678.058	5[illegible].320	[illegible]	19.291	1.0095	37.58	19.79	-2.220	.0920
2	7.4977	910.19	712.01	1155.40	679.183	564.5[illegible]	35.6[illegible]	19.334	.9889	38.04	17.64	-2.351	.0931
3	7.5454	899.09	712.70	1144.36	680.350	571.833	36.773	19.970	.9752	38.50	15.57	-2.509	.0941
4	7.5945	882.72	713.44	1134.33	681.594	574.340	36.835	20.293	.9651	38.95	13.58	-2.696	.0951
5	7.6447	870.11	714.71	1125.43	682.778	577.212	37.027	20.600	.9545	39.39	11.65	-2.911	.0961
6	7.6943	853.33	714.43	1116.51	683.950	580.746	37.11[illegible]	20.892	.9443	39.75	9.78	-3.155	.0970
7	7.7433	845.73	712.33	1108.60	684.355	583.295	37.233	21.169	.9331	40.21	7.98	-3.427	.0978
8	7.7931	834.96	711.61	1101.95	687.321	586.823	37.363	21.437	.9225	40.77	6.23	-3.727	.0985
9	7.8433	823.37	722.32	1095.42	689.475	590.000	37.51[illegible]	21.697	.9105	41.33	4.53	-4.061	.0991
10	7.8937	812.50	729.45	1091.33	691.932	593.259	37.63[illegible]	21.953	.9[illegible]2	41.92	2.89	-4.436	.0997
11	7.9545	793.17	742.53	1087.33	696.209	598.464	37.80[illegible]	22.207	.9052	43.09	1.30	-4.969	.1000
12	8.0103	775.28	755.15	1082.47	700.694	603.706	37.93[illegible]	22.461	.8933	44.26	-.24	-5.330	.1003
13	8.0677	755.43	770.07	1078.74	705.352	609.146	38.05[illegible]	22.717	.8914	45.55	-1.72	-5.847	.1005
14	8.1274	731.73	785.19	1073.29	710.398	615.192	38.12[illegible]	22.979	.8823	47.02	-3.15	-6.915	.1007
15	8.1837	705.04	791.53	1065.33	715.105	621.383	38.12[illegible]	23.245	.8714	48.56	-4.53	-8.106	.1008
16	8.2555	660.75	819.14	1054.11	720.806	629.034	37.995	23.521	.8573	50.05	-5.87	-9.755	.1008
17	8.3271	612.04	841.40	1040.31	729.068	639.645	37.751	23.812	.8375	53.94	-7.10	-11.997	.1003
18	8.4074	545.90	857.32	1025.24	737.713	650.999	37.43[illegible]	24.124	.8133	57.83	-8.13	-15.254	.0999
19	8.4934	487.12	853.39	996.36	740.457	658.363	36.975	24.456	.7924	60.74	-8.96	-23.281	.1001
20	8.6034	413.31	872.03	955.26	743.873	667.962	35.44[illegible]	24.812	.7627	64.61	-9.69	-29.399	.1002
21	8.7359	302.38	883.73	933.35	751.075	679.036	35.053	25.195	.7354	71.18	-9.37	**********	.1000

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.869	-34.653	10.510	.0565	1350.9	.9639	1124.11	35.026	669.392	2.486	.307	.9646	.9688
2	-24.928	2.893	-35.440	10.512	.0599	1359.7	.9551	1117.03	35.233	671.382	2.494	.309	.9615?	[illegible]
3	-25.689	2.733	-35.200	10.510	.0633	1368.5	.9468	1110.45	35.531	673.352	2.502	.312	.9585?	[illegible]
4	-26.446	2.308	-36.950	10.505	.0667	1377.4	.9393	1104.56	35.832	675.366	2.510	.314	.9551	[illegible]
5	-27.205	1.714	-37.598	10.493	.0700	1386.4	.9326	1099.54	36.105	678.010	2.518	.316	.9518	.9579?
6	-27.959	1.224	-38.433?	10.473	.0732	1395.4	.9269	1095.43	36.353	680.086?	2.526	.319	.9484?	.9547?
7	-28.676?	1.102	-39.123?	10.447	.0777	1404.5	.9213	1091.43	36.637?	682.200	2.534	.321	.9442	.9510
8	-29.336	1.254	-39.735	10.420	.0862	1413.8	.9138	1085.53	36.795	684.356	2.542	.325	.9369	.9446?
9	-29.938	1.575	-40.338	10.400	.0943	1423.2	.9069	1080.20	36.951?	686.559?	2.553	.329	.9290?	.9383?
10	-30.484	2.048	-40.891	10.397	.1031	1432.8	.8997	1074.63	37.107	688.813?	2.565	.334	.9208?	.9316?
11	-30.981	2.676	-41.404	10.423	.1274	1442.6	.8823?	1059.40	36.838?	691.135	2.572	.342	.9028?	.9169?
12	-31.436	3.430	-41.936	10.501	.1502	1452.7	.8651	1042.20	36.583	693.545	2.581	.351	.8838?	.8991?
13	-31.853?	4.533?	-42.532	10.600	.1726	1463.1	.8471	1023.15	36.313	696.051	2.589	.360	.8651	.8817?
14	-32.237	5.705?	-43.255	11.028	.1979?	1473.9	.8263	1004.86	35.952	698.572	2.594	.370	.8441?	.8633?
15	-32.598	7.090	-44.235?	11.637	.2211	1485.2	.8053	984.10	35.605	701.430	2.594?	.379	.8235	.8433?
16	-32.944	8.536?	-45.380	12.636	.2515	1497.1	.7766	954.82	35.024	704.367	2.585	.390	.7971	.8220
17	-33.302	10.083	-47.306	14.203	.2959	1510.1	.7316	906.92	33.975	707.584	2.569	.406	.7599	.7891?
18	-33.725?	11.597	-50.271	16.546?	.3391?	1524.7	.6830	854.08	32.946?	711.226	2.551	.422	.7234?	.7567?
19	-34.222?	12.785	-54.054	19.832?	.3592?	1541.2	.6598	829.80	32.739	715.395	2.516	.428	.7024?	.7378?
20	-34.767	13.304	-58.950	24.213	.3823?	1560.2	.6345	802.99	32.519	720.259	2.488?	.434	.6795	.7169?
21	-35.617	13.234	-65.457	30.849	.4204	1584.3	.5941	753.56	31.372	726.483	2.454	.449	.6480	.6886?

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.543 ISEN. EFF.= .942 POLY. EFF.= .861 DELTA T ON T = .362

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	923.85	1062.78	1408.13	759.408	595.680	54.165	23.029	1.1766	49.00	10.63	-2.464	.1042?
2	7.5836	909.15	1053.36	1399.39?	759.767	599.028	54.067	23.404	1.1627	49.39	9.65	-3.278	.1053?
3	7.6222	895.53	1043.83?	1384.47	760.118?	601.891	53.953	23.717	1.1503	49.70	8.69	-4.588?	.1062?
4	7.6596	885.49?	1032.15?	1375.15	760.457	604.358	53.843	23.9[illegible]	1.1408	49.92	7.74	-7.023	.1069?
5	7.6979	877.63	1043.34	1367.24	760.783?	606.492	53.711	24.16[illegible]	1.1323	50.06	6.81	-13.145	.1074
6	7.7371	871.58	1044.41	1360.50	761.100	608.334	53.572	24.328	1.1250	50.14	5.88	-53.317?	.1078
7	7.7770	866.92?	1040.69?	1354.41	761.482	610.091	53.392	24.449	1.1184	50.21?	4.96	27.676?	.1080
8	7.8179?	859.60?	1037.83?	1347.64	762.097	612.228	53.073	24.535	1.1109	50.37?	4.04	11.817?	.1080
9	7.8538?	853.33?	1034.98	1341.73	762.710	614.150	52.751	24.539?	1.1043	50.48	3.12	7.750?	.1079
10	7.9029	848.77	1032.64	1336.70	763.486	616.063	52.432	24.614	1.0984	50.58?	2.20	5.883	.1077
11	7.9473	831.13?	1040.41?	1331.81?	766.692	620.419	51.917	24.615?	1.0905	51.38	1.29	4.927	.1069?
12	7.9933?	813.35?	1045.08?	1326.96	769.959	624.742	51.402	24.598	1.0823	52.17	.38	4.166?	.1061?
13	8.0425?	795.51	1056.03?	1322.13	773.380	629.254	50.832	24.569	1.0732	53.01	-.52	3.724?	.1052?
14	8.0937	772.15?	1065.24?	1315.66?	777.208	634.532	50.173	24.532	1.0655?	54.06	-1.42	3.418?	.1042?
15	8.1480	747.49	1074.41?	1305.85?	781.151	639.989	49.495?	24.494	1.0555?	55.17?	-2.34	3.202?	.1032?
16	8.2061	711.31	1093.17?	1304.22	787.583?	647.486?	48.853?	24.464	1.0457	56.95	-3.27	3.054?	.1018?
17	8.2704	649.82?	1132.06?	1303.82?	799.225?	659.327	48.291	24.466	1.0361	60.26	-4.26	2.990?	.1000?
18	8.3449	562.08?	1172.33?	1300.62?	811.835	672.754	47.687?	24.532?	1.0234	64.40	-5.28	3.083?	.0983?
19	8.4310?	510.81?	1169.72?	1294.75?	819.036?	681.288	47.350	24.677	1.0124	66.76	-6.42	3.394?	.0976?
20	8.5310	436.87?	1203.07?	1285.24	827.451?	691.816	46.961	24.910	.9973?	70.18	-7.64	4.125	.0970
21	8.6699	259.09	1239.99	1260.77	840.354	708.744	46.377	25.352	.9715	78.20	-8.95	20.749	.0964

BLADE DATA

LOCAT-ION	BLADE-ANGLES SUCTION	LEAD	REL FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.331	-13.344	4.701	.3693	1369.2	.8133	973.33	35.564	674.096	3.686	.404	.9682	.9734
2	-13.320	10.538	-13.202	5.462	.3742	1375.6	.8013	961.65	35.712	675.564	3.679	.405	.9651	.9708
3	-14.306	11.326	-20.323	5.023	.0735	1382.3	.7924	953.18	35.863	677.375	3.672	.405	.9620	.9682
4	-14.699	3.736	-22.332	5.145	.0827	1389.1	.7860	947.42	36.017	678.530	3.664	.466	.9587	.9654
5	-15.456	3.113	-21.310	5.224	.0873	1396.0	.7818	944.04	36.175	680.227	3.655	.467	.9552	.9625
6	-16.106	3.359	-22.353	5.257	.0911	1403.1	.7796	942.78	36.335	681.866	3.645	.467	.9517	.9596
7	-16.323	7.030	-23.336	5.273	.0967	1410.4	.7781	942.35	36.464	683.549	3.633	.468	.9472	.9558
8	-17.311	7.166	-21.342	5.331	.1075	1417.8	.7747	939.79	36.459	685.280	3.612	.469	.9397	.9494
9	-18.149	5.923	-24.270	5.421	.1177	1425.4	.7727	938.90	36.481	687.064	3.590	.470	.9321	.9430
10	-18.729	5.972	-25.232	6.533	.1207	1433.2	.7712	933.52	36.465	688.903	3.568	.472	.9237	.9359
11	-19.255	5.717	-25.745	5.493	.1591	1441.2	.7556	922.73	35.924	690.817	3.533	.478	.9032	.9186
12	-19.738	7.023	-25.203	5.525	.1877	1449.7	.7406	907.54	35.397	692.829	3.498	.484	.8830	.9015
13	-20.176	7.531	-25.330	5.557	.2159	1458.5	.7250	891.53	34.945	694.948	3.460	.491	.8622	.8837
14	-20.572	8.432	-27.335	5.953	.2470	1467.8	.7052	870.79	34.173	697.192	3.414	.498	.8385	.8635
15	-20.929	8.444	-28.344	7.415	.2763	1477.5	.6849	849.31	33.511	699.563	3.366	.506	.8149	.8432
16	-21.247	10.531	-29.344	7.797	.3146	1488.2	.6524	813.62	32.545	702.160	3.324	.518	.7852	.8176
17	-21.520	11.832	-29.522	8.103	.3699	1499.3	.5913	744.07	30.981	705.034	3.286	.541	.7438	.7820
18	-21.737	13.036	-31.203	9.405	.4239	1513.3	.5171	657.14	29.427	708.387	3.245	.565	.7026	.7464
19	-21.327	13.863	-33.539	11.762	.4490	1529.0	.4795	613.19	28.871	712.304	3.222	.579	.6808	.7274
20	-21.554	13.539	-37.745	16.141	.4730	1547.1	.4281	551.58	28.245	716.902	3.196	.595	.6565	.7063
21	-21.371	13.139	-52.355	10.655	.5295	1572.3	.3232	421.36	27.249	723.372	3.156	.620	.6220	.6760

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.452 ISEN. EFF.= .839 POLY. EFF.= .864 DELTA T ON T = .505

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5745	355.73	1057.41	1333.55	773.405	605.413	54.165	24.448	1.1299	50.97	7.82	9.349	.1087
2	7.6127	351.13	1055.53	1352.33	773.767	606.577	54.067	24.456	1.1291	50.79	7.72	9.560	.1087
3	7.6513	354.41	1051.31	1351.59	750.118	607.175	53.959	24.437	1.1271	50.57	7.58	9.781	.1085
4	7.6903	368.94	1047.35	1361.35	750.457	607.434	53.843	24.404	1.1265	50.34	7.39	9.968	.1083
5	7.7295	373.18	1044.05	1351.05	750.783	607.827	53.711	24.364	1.1253	50.09	7.16	9.733	.1080
6	7.7690	377.25	1040.11	1350.55	751.100	608.238	53.577	24.323	1.1252	49.86	6.95	9.427	.1078
7	7.8097	379.90	1035.47	1359.50	751.482	608.823	53.332	24.285	1.1237	49.67	6.70	9.006	.1075
8	7.8430	378.39	1033.33	1356.53	752.097	610.219	53.073	24.254	1.1201	49.55	6.44	8.523	.1071
9	7.8830	376.48	1031.14	1353.32	752.710	611.574	52.751	24.228	1.1161	49.04	6.17	7.994	.1066
10	7.9330	373.45	1029.10	1343.53	753.486	613.140	52.432	24.207	1.1118	49.68	5.90	7.436	.1064
11	7.9723	357.37	1137.11	1345.49	760.692	617.345	51.917	24.183	1.1045	50.43	5.60	6.874	.1056
12	8.0155	339.55	1145.25	1340.55	769.929	621.571	51.402	24.177	1.0959	51.22	5.28	6.324	.1048
13	8.0535	320.58	1053.05	1335.53	773.380	626.313	50.852	24.168	1.0885	52.09	4.94	5.792	.1040
14	8.1074	735.33	1163.43	1328.04	777.206	631.822	50.173	24.166	1.0778	53.20	4.54	5.287	.1031
15	8.1573	758.23	1073.23	1319.85	781.151	637.596	49.495	24.174	1.0653	54.40	4.08	4.815	.1022
16	8.2098	723.32	1032.53	1313.57	787.533	645.475	48.853	24.198	1.0543	56.29	3.52	4.378	.1010
17	8.2675	550.83	1137.45	1311.23	799.225	657.731	48.731	24.258	1.0432	59.73	2.76	3.987	.0994
18	8.3341	571.39	1174.42	1305.04	811.035	671.385	47.387	24.383	1.0239	64.06	1.63	3.666	.0979
19	8.4115	512.92	1192.43	1298.12	813.035	680.566	47.350	24.585	1.0156	66.73	-.00	3.404	.0974
20	8.5034	425.75	1213.09	1285.35	827.451	691.538	45.951	24.874	.9987	70.53	-2.33	3.139	.0969
21	8.6333	237.35	1244.29	1260.73	840.354	708.752	45.377	25.353	.9715	79.20	-6.18	3.053	.0964

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6199	1001.02	1053.02	1452.89	759.408	585.074	54.165	21.623	1.2248	46.45	9.06	26.367	.0996
2	7.6656	1022.70	1049.31	1465.24	759.767	582.447	54.067	21.210	1.2382	45.68	8.89	43.914	.0981
3	7.7107	1041.13	1043.71	1474.20	760.118	580.615	53.953	20.901	1.2473	45.07	8.65	111.887	.0970
4	7.7547	1052.69	1039.26	1479.26	760.457	579.719	53.840	20.710	1.2527	44.63	8.38	-392.767	.0963
5	7.7974	1059.01	1034.97	1480.76	760.783	579.679	53.711	20.624	1.2541	44.34	8.09	-61.761	.0959
6	7.8393	1061.26	1030.80	1479.47	761.100	580.317	53.572	20.620	1.2523	44.17	7.81	-36.709	.0958
7	7.8806	1059.65	1027.02	1475.63	761.482	581.530	53.392	20.677	1.2477	44.10	7.55	-27.792	.0958
8	7.9216	1052.94	1024.31	1468.98	762.097	583.891	53.075	20.777	1.2396	44.21	7.34	-23.970	.0959
9	7.9626	1044.69	1021.62	1461.20	762.710	586.401	52.761	20.907	1.2304	44.36	7.17	-22.515	.0961
10	8.0036	1034.64	1019.64	1452.78	763.485	589.220	52.432	21.052	1.2205	44.58	7.04	-22.493	.0963
11	8.0451	1014.09	1027.77	1443.85	766.692	594.604	51.917	21.204	1.2075	45.38	6.95	-23.492	.0961
12	8.0873	992.53	1035.38	1434.70	769.959	600.088	51.402	21.357	1.1944	46.23	6.87	-25.610	.0959
13	8.1303	969.21	1044.63	1425.00	773.380	605.844	50.852	21.507	1.1807	47.14	6.80	-29.477	.0957
14	8.1745	941.19	1054.73	1413.61	777.208	612.392	50.179	21.656	1.1651	48.26	6.72	-36.768	.0953
15	8.2199	911.36	1065.02	1401.73	781.151	619.146	49.496	21.805	1.1490	49.45	6.60	-54.130	.0949
16	8.2672	871.75	1085.11	1391.91	787.583	627.918	48.853	21.963	1.1331	51.22	6.38	-121.964	.0943
17	8.3176	808.75	1125.66	1386.07	799.225	641.027	48.291	22.160	1.1169	54.30	5.92	913.814	.0932
18	8.3733	726.52	1168.92	1376.30	811.835	656.009	47.687	22.450	1.0964	58.14	4.98	167.771	.0922
19	8.4336	661.14	1189.07	1360.51	819.036	666.863	47.350	22.886	1.0751	60.93	3.36	103.582	.0925
20	8.5035	559.60	1212.28	1335.24	827.451	681.001	45.961	23.564	1.0443	65.22	.81	206.209	.0933
21	8.6199	308.07	1247.18	1284.67	840.354	704.979	46.377	24.580	.9873	76.12	-4.27	-27.461	.0951

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	46.450	-2.367	0.0000	0.0	1.2248	1452.89	54.165	759.408	3.686	.464	.9682	.9734
2	48.018	-37.422	45.680	-2.330	0.0000	0.0	1.2380	1465.24	54.067	759.767	3.679	.465	.9651	.9708
3	47.187	-34.669	45.071	-2.116	0.0000	0.0	1.2475	1474.20	53.953	760.118	3.672	.465	.9620	.9682
4	46.548	-31.736	44.632	-1.916	0.0000	0.0	1.2527	1479.26	53.840	760.457	3.664	.466	.9587	.9654
5	46.057	-28.741	44.342	-1.715	0.0000	0.0	1.2541	1480.76	53.711	760.783	3.655	.467	.9552	.9625
6	45.679	-25.670	44.166	-1.514	0.0000	0.0	1.2523	1479.47	53.572	761.100	3.645	.467	.9517	.9596
7	45.358	-22.597	44.104	-1.254	0.0000	0.0	1.2477	1475.69	53.392	761.482	3.633	.468	.9472	.9558
8	45.083	-19.569	44.210	-.873	0.0000	0.0	1.2396	1468.98	53.075	762.097	3.612	.469	.9357	.9494
9	44.853	-16.519	44.360	-.493	0.0000	0.0	1.2304	1461.20	52.761	762.710	3.590	.470	.9321	.9430
10	44.676	-13.234	44.576	-.130	0.0000	0.0	1.2205	1452.78	52.432	763.485	3.568	.472	.9237	.9359
11	44.559	-9.723	45.384	.825	0.0000	0.0	1.2075	1443.85	51.917	766.692	3.533	.478	.9032	.9186
12	44.522	-5.874	46.227	1.705	0.0000	0.0	1.1944	1434.70	51.402	769.959	3.498	.484	.8830	.9015
13	44.607	-2.061	47.145	2.538	0.0000	0.0	1.1807	1425.00	50.852	773.380	3.460	.491	.8622	.8837
14	44.846	1.414	48.256	3.410	0.0000	0.0	1.1651	1413.61	50.178	777.208	3.414	.498	.8385	.8632
15	45.198	4.865	49.446	4.247	0.0000	0.0	1.1490	1401.73	49.496	781.151	3.368	.506	.8149	.8432
16	45.579	9.139	51.223	5.643	0.0000	0.0	1.1331	1391.91	48.853	787.583	3.324	.518	.7852	.8176
17	45.931	15.261	54.3[illegible]	8.373	0.0000	0.0	1.1169	1386.07	48.291	799.225	3.286	.541	.7438	.7828
18	46.174	23.074	58.1[illegible]	11.604	0.0000	0.0	1.0964	1376.30	47.687	811.835	3.255	.565	.7026	.7484
19	47.542	31.492	60.[illegible]	13.384	0.0000	0.0	1.0751	1360.51	47.350	819.036	3.222	.579	.6888	.7274
20	49.059	39.458	65.218	16.159	0.0000	0.0	1.0443	1335.24	46.961	827.451	3.196	.595	.6565	.7063
21	50.814	46.652	76.125	25.311	0.0000	0.0	.9878	1284.67	46.377	840.354	3.156	.620	.6228	.6760

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.462 ISEN. EFF.= .839 POLY. EFF.= .864 DELTA T ON T = .585

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	V MERID	V TANG.	V TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	1102.36	719.77	1311.81	759.408	617.409	51.493	24.826	1.0758	32.61	5.21	-3.688	.1084
2	7.7521	1079.42	[illegible]	1280.30	759.767	624.537	51.405	25.760	1.0453	32.53	4.76	-3.445	.1112
3	7.7831	1050.02	665.27	1249.10	759.118	631.632	51.305	26.706	1.0131	32.21	4.30	-3.260	.1140
4	7.8230	1032.39	642.13	1216.03	759.457	638.21	51.172	27.629	.9917	31.88	3.86	-3.137	.1166
5	7.8630	1009.27	620.37	1184.79	760.753	645.049	51.003	28.496	.9517	31.53	3.44	-3.073	.1191
6	7.9002	985.29	601.06	1154.12	761.100	651.302	50.741	29.265	.9227	31.38	3.07	-3.055	.1212
7	7.9379	961.63	583.76	1124.95	761.402	657.195	50.421	29.382	.8934	31.26	2.77	-3.072	.1230
8	7.9757	939.32	567.43	1096.31	762.097	663.063	49.995	30.588	.8633	31.17	2.58	-3.112	.1243
9	8.0149	915.45	552.37	1070.05	762.710	668.361	49.597	31.114	.8447	31.08	2.48	-3.170	.1255
10	8.0541	897.31	539.15	1047.34	763.486	673.135	49.255	31.573	.8238	30.96	2.47	-3.241	.1264
11	8.0947	879.13	525.41	1024.63	765.592	680.238	48.733	31.973	.8019	30.91	2.53	-3.331	.1267
12	8.1355	860.98	515.20	1003.27	769.959	687.109	48.327	32.321	.7812	30.90	2.64	-3.446	.1268
13	8.1734	844.77	505.97	985.05	773.380	693.539	47.950	32.523	.7635	30.95	2.78	-3.584	.1268
14	8.2234	827.51	493.53	966.11	777.208	700.438	47.435	32.381	.7452	31.07	2.94	-3.745	.1265
15	8.2637	810.37	481.07	948.37	781.151	707.202	47.042	33.090	.7281	31.23	3.10	-3.941	.1261
16	8.3151	793.75	483.44	936.20	787.583	715.552	46.674	33.239	.7147	31.45	3.22	-4.214	.1252
17	8.3623	781.78	491.41	931.93	799.225	727.931	46.372	33.304	.7054	31.83	3.19	-4.732	.1233
18	8.4123	785.38	499.83	931.74	811.835	740.629	46.032	33.241	.6994	32.44	2.37	-6.034	.1210
19	8.4627	787.31	510.14	941.43	819.036	746.325	45.841	32.960	.7043	33.23	2.16	-13.343	.1190
20	8.5137	797.51	533.23	962.15	827.451	751.612	45.565	32.390	.7170	34.02	.88	1205.239	.1161
21	8.5730	812.25	559.44	985.25	840.354	750.743	45.027	31.514	.7305	34.56	-2.03	5.347	.1120

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BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES CHORD	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.947	32.334	.949	.0822	0.0	1.0758	1311.81	51.493	759.408	3.504	.454	.9236	.9357
2	31.670	-23.440	32.531	.906	.0813	0.0	1.0450	1280.30	51.405	759.767	3.498	.455	.9207	.9332
3	31.337	-21.532	32.210	.973	.0803	0.0	1.0131	1249.10	51.305	750.118	3.491	.455	.9177	.9306
4	30.940	-19.449	31.870	.983	.0805	0.0	.9917	1216.03	51.172	760.457	3.482	.465	.9141	.9276
5	30.579	-17.200	31.535	.967	.0818	0.0	.9517	1184.79	51.003	760.753	3.471	.457	.9100	.9241
6	30.454	-15.024	31.342	.923	.0859	0.0	.9227	1154.12	50.741	761.100	3.453	.467	.9043	.9193
7	30.311	-12.456	31.260	.949	.0905	0.0	.8954	1124.95	50.421	761.452	3.431	.468	.8974	.9134
8	30.202	-10.959	31.172	.970	.0954	0.0	.8638	1096.31	49.936	762.397	3.402	.459	.8879	.9052
9	30.083	-8.920	31.074	.940	.0985	0.0	.8447	1070.05	49.587	762.710	3.374	.470	.8796	.8972
10	29.975	-5.814	30.982	1.073	.1012	0.0	.8238	1047.34	49.256	763.486	3.352	.472	.8701	.8899
11	29.959	-4.631	30.913	1.024	.1013	0.0	.8019	1024.63	48.737	766.592	3.320	.478	.8508	.8734
12	29.962	-2.579	30.899	1.036	.1023	0.0	.7812	1003.27	48.327	769.159	3.288	.494	.8318	.8570
13	29.939	-.457	30.954	1.045	.0989	0.0	.7636	985.05	47.950	773.380	3.263	.491	.8142	.8419
14	30.023	1.729	31.070	1.059	.0941	0.0	.7452	966.11	47.435	777.206	3.232	.498	.7944	.8248
15	30.179	4.236	31.227	1.048	.0886	0.0	.7251	948.37	47.042	781.151	3.201	.506	.7749	.8079
16	30.403	7.337	31.445	1.043	.0810	0.0	.7147	936.20	46.674	787.583	3.175	.518	.7502	.7865
17	30.799	10.916	31.826	1.037	.0734	0.0	.7054	931.88	46.372	799.225	3.155	.541	.7141	.7553
18	31.407	13.043	32.441	1.034	.0695	0.0	.6994	931.78	46.032	811.635	3.132	.565	.6779	.7240
19	32.147	19.512	33.231	1.034	.0617	0.0	.7043	941.53	45.940	819.035	3.119	.579	.6587	.7073
20	32.974	23.927	34.016	1.042	.0597	0.0	.7170	962.15	45.565	827.451	3.101	.595	.6366	.6880
21	33.473	29.275	34.557	1.080	.0628	0.0	.7306	985.26	45.027	840.354	3.064	.620	.6033	.6586

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.293 ISEN. EFF.= .793 POLY. EFF.= .829 DELTA T ON T = .505

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	987.01	312.81	1035.33	759.408	671.098	48.915	31.615	.8157	17.59	-2.23	-5.196	.1276
2	7.7547	972.66	307.62	1020.15	759.767	674.038	48.792	31.972	.8019	17.55	-2.41	-5.728	.1278
3	7.7871	955.68	303.07	1005.64	760.118	676.819	48.653	32.294	.7889	17.54	-2.55	-6.400	.1286
4	7.8203	945.53	298.95	991.66	760.457	679.465	48.487	32.577	.7765	17.55	-2.66	-7.261	.1293
5	7.8543	932.59	295.01	978.14	760.783	681.992	48.287	32.820	.7645	17.55	-2.72	-8.376	.1297
6	7.8893	917.21	289.87	961.92	761.100	684.908	47.929	33.021	.7502	17.54	-2.72	-9.859	.1299
7	7.9254	901.36	284.02	945.05	761.482	687.949	47.493	33.180	.7355	17.49	-2.65	-11.915	.1300
8	7.9630	884.42	277.56	926.96	762.097	691.362	46.979	33.299	.7196	17.42	-2.50	-14.893	.1298
9	8.0021	866.71	271.89	910.26	762.710	694.509	46.483	33.384	.7051	17.38	-2.26	-19.528	.1295
10	8.0429	857.72	268.51	899.77	763.486	697.003	46.146	33.443	.6950	17.38	-1.95	-27.374	.1291
11	8.0847	845.81	265.35	886.46	766.692	702.037	45.717	33.483	.6830	17.42	-1.61	-42.493	.1285
12	8.1283	834.01	262.29	874.28	769.959	707.086	45.283	33.510	.6713	17.46	-1.22	-81.424	.1277
13	8.1733	828.01	260.78	868.10	773.380	711.411	45.054	33.530	.6645	17.48	-.82	-311.876	.1270
14	8.2197	820.51	258.82	860.65	777.208	716.317	44.779	33.552	.6565	17.50	-.43	313.755	.1262
15	8.2674	813.37	256.39	853.00	781.151	721.358	44.511	33.576	.6485	17.53	-.07	141.897	.1255
16	8.3153	810.75	257.21	850.58	787.583	728.160	44.375	33.612	.6437	17.60	.26	117.886	.1244
17	8.3634	811.80	259.60	852.29	799.225	739.616	44.293	33.653	.6401	17.73	.53	129.314	.1226
18	8.4177	811.73	263.18	853.33	811.835	752.142	44.183	33.701	.6357	17.96	.75	177.394	.1208
19	8.4702	809.97	267.85	853.11	819.036	759.410	44.133	33.746	.6325	18.30	.90	247.885	.1198
20	8.5239	807.44	273.53	852.53	827.451	757.949	44.015	33.765	.6287	18.72	.97	192.444	.1185
21	8.5795	802.80	280.03	850.24	840.354	751.240	43.713	33.728	.6217	19.23	.88	76.314	.1164

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.414	17.585	1.351	.1613	0.0	.8157	1035.39	48.916	759.408	3.329	.464	.8798	.8974
2	16.189	-9.935	17.550	1.362	.1605	0.0	.8019	1020.15	48.792	759.767	3.320	.465	.8754	.8943
3	16.164	-8.439	17.540	1.375	.1605	0.0	.7889	1005.64	48.653	760.118	3.311	.465	.8717	.8911
4	16.151	-7.836	17.546	1.395	.1616	0.0	.7765	991.66	48.487	760.457	3.299	.466	.8676	.8875
5	16.133	-7.137	17.554	1.420	.1639	0.0	.7645	978.14	48.287	760.783	3.286	.467	.8629	.8835
6	16.087	-6.444	17.538	1.452	.1713	0.0	.7502	961.92	47.929	761.100	3.261	.467	.8554	.8770
7	16.003	-5.536	17.490	1.487	.1802	0.0	.7355	945.05	47.438	761.482	3.232	.468	.8463	.8691
8	15.900	-4.678	17.424	1.524	.1889	0.0	.7196	926.96	46.978	762.097	3.197	.469	.8349	.8592
9	15.819	-3.725	17.379	1.560	.1971	0.0	.7051	910.26	46.483	762.710	3.163	.470	.8239	.8495
10	15.789	-2.735	17.383	1.593	.2003	0.0	.6950	899.77	46.149	763.486	3.140	.472	.8152	.8419
11	15.796	-1.902	17.419	1.623	.2019	0.0	.6830	886.46	45.717	766.692	3.111	.478	.7969	.8260
12	15.811	-1.126	17.438	1.647	.2035	0.0	.6713	874.28	45.238	769.959	3.082	.484	.7788	.8103
13	15.816	-.485	17.482	1.666	.1976	0.0	.6645	868.10	45.054	773.380	3.066	.491	.7641	.7975
14	15.825	.118	17.501	1.676	.1893	0.0	.6566	860.65	44.779	777.208	3.047	.498	.7479	.7834
15	15.859	.824	17.535	1.676	.1800	0.0	.6485	853.00	44.510	781.151	3.029	.506	.7320	.7695
16	15.934	1.715	17.602	1.667	.1665	0.0	.6437	850.58	44.375	787.583	3.020	.518	.7128	.7521
17	16.077	2.763	17.733	1.656	.1530	0.0	.6401	852.29	44.293	799.225	3.014	.541	.6809	.7232
18	16.316	3.934	17.964	1.648	.1386	0.0	.6357	853.33	44.183	811.835	3.007	.565	.6497	.6941
19	16.654	5.254	18.299	1.645	.1315	0.0	.6325	853.11	44.133	819.036	3.003	.579	.6331	.6837
20	17.063	6.784	18.718	1.655	.1259	0.0	.6287	852.53	44.016	827.451	2.995	.595	.6139	.6669
21	17.510	3.542	19.229	1.719	.1237	0.0	.5217	850.24	43.715	840.354	2.975	.620	.5848	.6413

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.122 ISEN. EFF.= .757 POLY. EFF.= .792 DELTA T ON T = .505

STATION 1, FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	------VELOCITIES------- MERID	TANGEN	TOTAL	--TEMPERATURES-- TOTAL	STATIC	---PRESSURES--- TOTAL	STATIC	MACH NO	---ANGLES--- WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	853.20	92.42	858.19	759.408	693.787	46.324	34.528	.6629	6.18	-4.29	16.241	.1332
2	7.7066	850.95	90.53	855.73	759.767	699.489	46.129	34.444	.6606	6.08	-4.11	15.899	.1327
3	7.7421	848.05	88.39	853.29	760.118	700.193	45.920	34.353	.6583	5.98	-3.90	15.518	.1322
4	7.7754	846.02	87.31	850.51	760.457	700.923	45.693	34.255	.6558	5.89	-3.67	15.099	.1317
5	7.8157	842.35	85.83	847.31	760.783	701.699	45.445	34.151	.6530	5.82	-3.42	14.648	.1312
6	7.8541	833.21	83.94	837.42	761.100	703.390	44.984	34.042	.6445	5.75	-3.13	14.243	.1304
7	7.8940	820.91	81.37	824.93	761.482	705.480	44.443	33.930	.6341	5.70	-2.80	14.001	.1296
8	7.9354	806.21	79.57	810.14	762.097	708.098	43.851	33.818	.6216	5.64	-2.42	14.014	.1287
9	7.9747	791.91	77.62	795.71	762.710	710.624	43.293	33.710	.6095	5.60	-2.00	14.373	.1279
10	8.0235	785.40	75.43	789.12	763.486	712.263	42.966	33.611	.6037	5.56	-1.56	15.040	.1272
11	8.0597	777.50	73.34	781.14	756.692	716.513	42.595	33.526	.5959	5.53	-1.11	16.039	.1261
12	8.1175	768.40	74.13	771.97	759.959	720.965	42.223	33.461	.5871	5.51	-.65	17.623	.1251
13	8.1637	769.50	74.14	773.15	773.380	724.247	42.159	33.420	.5857	5.50	-.22	19.891	.1244
14	8.2157	769.45	74.03	773.30	777.208	728.109	42.090	33.409	.5850	5.50	.16	22.925	.1237
15	8.2575	768.10	73.92	771.71	731.151	732.231	42.029	33.428	.5825	5.50	.49	27.313	.1230
16	8.3132	773.36	74.05	775.95	737.563	738.018	42.140	33.473	.5842	5.51	.76	33.698	.1222
17	8.3714	781.27	75.82	784.95	739.225	748.030	42.285	33.542	.5861	5.56	.95	42.782	.1207
18	8.4245	787.97	77.75	791.70	811.835	760.471	42.410	33.630	.5865	5.64	1.07	56.975	.1192
19	8.4734	788.40	79.53	792.41	819.036	767.611	42.456	33.733	.5844	5.77	1.13	85.668	.1184
20	8.5334	787.05	82.45	791.37	827.451	776.198	42.454	33.848	.5805	5.98	1.13	186.640	.1175
21	8.5939	783.51	85.35	788.31	840.354	789.557	42.409	33.971	.5735	6.33	1.06	-610.607	.1160

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.955	-1.094	5.133	2.218	.2409	0.0	.6628	858.19	46.324	759.408	3.152	.464	.8324	.8568
2	3.845	-1.031	5.079	2.234	.2416	0.0	.6606	855.78	46.129	759.767	3.139	.465	.8275	.8525
3	3.723	-.935	5.990	2.257	.2432	0.0	.6583	853.29	45.920	760.118	3.125	.455	.8225	.8481
4	3.604	-.853	5.392	2.288	.2459	0.0	.6558	850.51	45.633	760.457	3.109	.466	.8171	.8434
5	3.499	-.777	5.517	2.329	.2499	0.0	.6530	847.31	45.445	760.783	3.092	.457	.8114	.8384
6	3.376	-.695	5.753	2.377	.2606	0.0	.6446	837.42	44.984	761.100	3.061	.467	.8018	.8299
7	3.264	-.617	5.995	2.431	.2734	0.0	.6341	824.98	44.448	761.482	3.024	.468	.7905	.8200
8	3.152	-.547	7.343	2.491	.2857	0.0	.6215	810.14	43.851	762.097	2.984	.469	.7773	.8082
9	3.045	-.435	5.598	2.553	.2974	0.0	.6095	795.71	43.298	762.710	2.946	.470	.7647	.7970
10	2.943	-.432	5.562	2.613	.3016	0.0	.6037	789.12	42.966	763.486	2.924	.472	.7562	.7894
11	2.869	-.330	5.534	2.665	.3035	0.0	.5959	781.14	42.595	756.692	2.898	.478	.7393	.7745
12	2.807	-.315	5.519	2.709	.3055	0.0	.5871	771.97	42.223	759.959	2.873	.484	.7227	.7598
13	2.767	-.230	5.532	2.735	.2962	0.0	.5867	773.16	42.159	773.380	2.869	.491	.7117	.7582
14	2.753	-.155	5.435	2.742	.2836	0.0	.5850	773.00	42.090	777.208	2.864	.493	.6998	.7399
15	2.770	-.144	5.437	2.727	.2695	0.0	.5825	771.71	42.029	731.151	2.860	.506	.6881	.7296
16	2.818	-.225	5.514	2.697	.2436	0.0	.5842	776.95	42.140	787.563	2.867	.518	.6735	.7170
17	2.891	-.335	5.556	2.605	.2238	0.0	.5861	784.96	42.235	739.225	2.877	.541	.6477	.6947
18	2.935	-.538	5.530	2.653	.2091	0.0	.5866	791.70	42.410	811.835	2.886	.565	.6216	.6720
19	3.113	-.813	5.757	2.655	.1935	0.0	.5844	792.41	42.450	819.036	2.890	.579	.6075	.6598
20	3.239	-.958	5.490	2.592	.1914	0.0	.580	791.37	42.434	827.451	2.891	.595	.5910	.6454
21	3.508	-1.095	6.325	2.818	.1846	0.0	.5735	788.31	42.409	840.354	2.886	.620	.5659	.6234

STATION 1, INTEGRATED PERFORMANCE PRESSURE RATIO = 2.943 ISEN. EFF.= .713 POLY. EFF.= .752 DELTA T ON T = .505

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1031.15	0.00	1031.13	759.408	671.812	43.747	28.382	.8113	0.00	-1.66	10.624	.1139
2	7.6770	1027.59	0.00	1027.59	759.767	672.779	43.470	28.298	.8085	0.00	-1.58	11.204	.1134
3	7.7131	1023.61	0.00	1023.61	760.118	673.807	43.185	28.218	.8048	0.00	-1.48	11.960	.1129
4	7.7542	1019.16	0.00	1019.15	760.457	674.899	42.892	28.142	.8006	0.00	-1.37	12.963	.1124
5	7.7943	1014.17	0.00	1014.17	760.783	676.064	42.591	28.072	.7960	0.00	-1.25	14.325	.1119
6	7.8357	1001.32	0.00	1001.32	761.100	678.521	42.018	28.009	.7846	0.00	-1.11	16.252	.1113
7	7.8787	985.63	0.00	985.63	761.482	681.480	41.372	27.954	.7706	0.00	-.95	19.144	.1106
8	7.9234	968.25	0.00	968.25	762.097	684.902	40.698	27.909	.7552	0.00	-.77	23.802	.1098
9	7.9699	951.31	0.00	951.31	762.710	688.203	40.079	27.874	.7402	0.00	-.58	32.234	.1092
10	8.0180	943.73	0.00	943.73	763.486	690.169	39.786	27.850	.7333	0.00	-.38	51.335	.1088
11	8.0673	936.70	0.00	936.70	766.692	694.481	39.486	27.837	.7256	0.00	-.18	127.128	.1080
12	8.1181	928.69	0.00	928.69	769.959	698.997	39.177	27.835	.7171	0.00	.02	-298.918	.1073
13	8.1699	933.56	0.00	933.56	773.380	701.688	39.274	27.843	.7195	0.00	.20	-73.018	.1069
14	8.2223	938.88	0.00	938.88	777.208	704.714	39.391	27.862	.7221	0.00	.36	-44.296	.1066
15	8.2752	943.92	0.00	943.92	781.151	707.897	39.509	27.888	.7243	0.00	.49	-33.812	.1062
16	8.3294	957.01	0.00	957.01	787.583	712.314	39.840	27.921	.7321	0.00	.58	-28.952	.1056
17	8.3819	973.61	0.00	973.61	799.225	721.384	40.193	27.960	.7402	0.00	.64	-26.647	.1045
18	8.4358	990.60	0.00	990.60	811.835	731.327	40.547	28.001	.7481	0.00	.67	-25.979	.1032
19	8.4900	999.06	0.00	999.06	819.036	737.191	40.739	28.044	.7516	0.00	.66	-26.616	.1025
20	8.5447	1007.93	0.00	1007.93	827.451	744.198	40.919	28.085	.7547	0.00	.61	-28.744	.1017
21	8.6000	1019.75	0.00	1019.75	840.354	755.226	41.100	28.122	.7581	0.00	.52	-33.985	.1004

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3202	0.0	.8119	1031.15	43.747	759.408	2.977	.464	.7841	.8148
2	-7.385	.020	0.000	7.385	.3225	0.0	.8085	1027.59	43.470	759.767	2.958	.465	.7776	.8083
3	-7.541	.019	0.000	7.541	.3259	0.0	.8048	1023.61	43.185	760.118	2.939	.465	.7710	.8024
4	-7.701	.018	0.000	7.701	.3304	0.0	.8006	1019.16	42.892	760.457	2.919	.466	.7643	.7964
5	-7.863	.016	0.000	7.863	.3361	0.0	.7960	1014.17	42.591	760.783	2.898	.467	.7574	.7903
6	-8.025	.014	0.000	8.025	.3506	0.0	.7846	1001.32	42.018	761.100	2.859	.467	.7453	.7793
7	-8.188	.012	0.000	8.188	.3674	0.0	.7706	985.63	41.372	761.482	2.815	.468	.7314	.7668
8	-8.350	.010	0.000	8.350	.3833	0.0	.7552	968.25	40.698	762.097	2.769	.469	.7163	.7531
9	-8.507	.009	0.000	8.507	.3951	0.0	.7402	951.31	40.079	762.710	2.727	.470	.7021	.7402
10	-8.653	.007	0.000	8.653	.4030	0.0	.7333	943.73	39.786	763.486	2.707	.472	.6940	.7328
11	-8.782	.005	0.000	8.782	.4047	0.0	.7256	936.70	39.486	766.692	2.687	.478	.6798	.7194
12	-8.893	.003	0.000	8.893	.4069	0.0	.7171	928.69	39.177	769.959	2.666	.484	.6648	.7059
13	-8.981	.001	0.000	8.981	.3946	0.0	.7195	933.56	39.274	773.380	2.672	.491	.6569	.6998
14	-9.040	-.001	0.000	9.040	.3782	0.0	.7221	938.88	39.391	777.208	2.680	.498	.6493	.6933
15	-9.062	-.004	0.000	9.062	.3606	0.0	.7243	943.92	39.509	781.151	2.688	.506	.6417	.6867
16	-9.059	-.007	0.000	9.059	.3352	0.0	.7321	957.01	39.840	787.583	2.711	.518	.6323	.6788
17	-9.039	-.012	0.000	9.059	.3099	0.0	.7402	973.61	40.133	799.225	2.735	.541	.6128	.6613
18	-9.084	-.018	0.000	9.084	.2829	0.0	.7481	990.60	40.547	811.835	2.759	.565	.5913	.6436
19	-9.125	-.024	0.000	9.125	.2702	0.0	.7516	999.06	40.739	819.036	2.772	.579	.5801	.6339
20	-9.169	-.031	0.000	9.169	.2583	0.0	.7547	1007.93	40.919	827.451	2.784	.595	.5669	.6226
21	-9.213	-.038	0.000	9.213	.2455	0.0	.7581	1019.75	41.100	840.354	2.797	.620	.5466	.6050

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.773 ISEN. EFF.= .666 POLY. EFF.= .709 DELTA T ON T = .585

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1041.04	0.00	1041.04	759.408	670.119	43.747	28.131	.8207	0.00	0.00	0.000	.1131
2	7.6755	1034.24	0.00	1034.24	759.767	671.647	43.473	28.130	.8144	0.00	-.01	2982.600	.1129
3	7.7140	1027.12	0.00	1027.12	760.118	673.212	43.195	28.130	.8079	0.00	-.02	1601.410	.1126
4	7.7535	1019.68	0.00	1019.68	760.457	674.811	42.892	28.129	.8011	0.00	-.03	1157.766	.1123
5	7.7935	1011.88	0.00	1011.88	760.783	676.448	42.591	28.128	.7940	0.00	-.03	952.515	.1121
6	7.8348	996.40	0.00	996.40	761.100	679.333	42.013	28.127	.7802	0.00	-.04	847.991	.1116
7	7.8775	978.32	0.00	978.32	761.482	682.666	41.372	28.126	.7642	0.00	-.04	803.404	.1110
8	7.9225	958.84	0.00	958.84	762.097	686.400	40.693	28.125	.7470	0.00	-.04	807.790	.1104
9	7.9630	940.15	0.00	940.15	762.710	689.945	40.073	28.124	.7306	0.00	-.04	867.029	.1099
10	8.0172	931.39	0.00	931.39	763.486	692.078	39.786	28.122	.7227	0.00	-.03	1000.210	.1095
11	8.0557	923.63	0.00	923.63	766.692	696.488	39.483	28.122	.7144	0.00	-.03	1253.691	.1088
12	8.1177	915.35	0.00	915.35	769.959	701.026	39.177	28.121	.7058	0.00	-.02	1830.410	.1081
13	8.1637	920.66	0.00	920.66	773.380	703.651	39.274	28.120	.7086	0.00	-.01	3458.729	.1077
14	8.2222	926.35	0.00	926.35	777.208	706.563	39.391	28.120	.7119	0.00	-.00	17564.756	.1073
15	8.2753	933.15	0.00	933.15	781.151	709.563	39.503	28.120	.7152	0.00	.00	-7370.626	.1068
16	8.3237	947.86	0.00	947.86	787.583	713.751	39.843	28.121	.7244	0.00	.01	-3679.855	.1062
17	8.3822	966.25	0.00	966.25	799.225	722.560	40.193	28.121	.7341	0.00	.01	-2936.702	.1049
18	8.4350	985.14	0.00	985.14	811.835	732.214	40.547	28.121	.7435	0.00	.01	-2921.880	.1035
19	8.4902	995.52	0.00	995.52	819.036	737.771	40.733	28.122	.7486	0.00	.01	-3542.644	.1027
20	8.5443	1006.25	0.00	1006.25	827.451	744.477	40.919	28.122	.7533	0.00	.01	-6013.742	.1018
21	8.6000	1019.75	0.00	1019.75	840.354	755.225	41.103	28.122	.7581	0.00	0.00	0.000	.1004

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1041.38	0.00	1041.38	759.408	670.061	43.747	28.122	.8210	0.00	0.00	0.000	.1131
2	7.6763	1034.57	0.00	1034.57	759.767	671.589	43.473	28.122	.8147	0.00	-.00	0.000	.1129
3	7.7145	1027.44	0.00	1027.44	760.118	673.157	43.185	28.122	.8082	0.00	-.00	0.000	.1126
4	7.7535	1019.97	0.00	1019.97	760.457	674.762	42.892	28.122	.8014	0.00	-.00	0.000	.1123
5	7.7935	1012.13	0.00	1012.13	760.783	676.405	42.591	28.122	.7943	0.00	-.00	0.000	.1121
6	7.8348	996.62	0.00	996.62	761.100	679.297	42.013	28.122	.7804	0.00	-.00	0.000	.1116
7	7.8777	978.49	0.00	978.49	761.482	682.638	41.372	28.122	.7644	0.00	-.00	0.000	.1110
8	7.9225	958.96	0.00	958.96	762.097	686.381	40.693	28.122	.7471	0.00	-.00	0.000	.1104
9	7.9630	940.22	0.00	940.22	762.710	689.934	40.073	28.122	.7307	0.00	-.00	0.000	.1099
10	8.0172	931.41	0.00	931.41	763.485	692.075	39.786	28.122	.7227	0.00	-.00	0.000	.1095
11	8.0557	923.61	0.00	923.61	766.692	696.491	39.485	28.122	.7144	0.00	-.00	0.000	.1088
12	8.1177	915.30	0.00	915.30	769.959	701.034	39.177	28.122	.7057	0.00	-.00	0.000	.1081
13	8.1637	920.58	0.00	920.58	773.380	703.672	39.274	28.122	.7085	0.00	-.00	0.000	.1077
14	8.2222	926.73	0.00	926.73	777.208	706.575	39.391	28.122	.7113	0.00	-.00	0.000	.1073
15	8.2753	933.07	0.00	933.07	781.151	709.575	39.503	28.122	.7152	0.00	-.00	0.000	.1068
16	8.3236	947.79	0.00	947.79	787.583	713.762	39.840	28.122	.7244	0.00	-.00	0.000	.1062
17	8.3822	966.20	0.00	966.20	799.225	722.568	40.193	28.122	.7340	0.00	-.00	0.000	.1049
18	8.4360	985.11	0.00	985.11	811.835	732.220	40.547	28.122	.7435	0.00	-.00	0.000	.1035
19	8.4902	995.51	0.00	995.51	819.035	737.773	40.733	28.122	.7485	0.00	-.00	0.000	.1027
20	8.5443	1006.25	0.00	1006.25	827.451	744.477	40.919	28.122	.7533	0.00	-.00	0.000	.1018
21	8.6000	1019.75	0.00	1019.75	840.354	755.225	41.100	28.122	.7581	0.00	0.00	0.000	.1004

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5439	1.2069	6.929	5.731	.0638	.4275	.4381	.5568	.7365	.7762	-60.937	-12.647	6.070	10.991
2	6.8615	7.5856	1.2261	6.549	5.882	.0742	.4488	.4382	.5555	.7165	.7701	-61.354	-13.320	6.231	10.698
3	6.9724	7.5222	1.2449	6.421	6.023	.0795	.4667	.4751	.5523	.6997	.7636	-61.740	-14.006	6.367	10.326
4	7.0825	7.5595	1.2634	6.243	6.143	.0827	.4819	.4892	.5451	.6855	.7574	-62.087	-14.689	6.420	9.796
5	7.1921	7.5979	1.2817	6.130	6.224	.0870	.4948	.5011	.5356	.6735	.7510	-62.390	-15.386	6.324	9.113
6	7.3014	7.7471	1.2997	6.050	6.257	.0911	.5056	.5109	.5242	.6634	.7444	-62.664	-16.106	6.042	8.359
7	7.4104	7.7770	1.3175	5.993	6.273	.0967	.5155	.5198	.5113	.6543	.7379	-62.926	-16.823	5.572	7.696
8	7.5192	7.8179	1.3351	5.950	6.331	.1075	.5264	.5299	.4973	.6443	.7321	-63.199	-17.511	4.916	7.186
9	7.6281	7.8598	1.3524	5.916	6.421	.1177	.5358	.5384	.4824	.6352	.7251	-63.458	-18.149	4.072	6.823
10	7.7371	7.9028	1.3695	5.889	6.533	.1287	.5444	.5403	.4665	.6270	.7235	-63.740	-18.723	3.060	6.652
11	7.8465	7.9473	1.3864	5.867	6.430	.1591	.5645	.5556	.4504	.6090	.7219	-64.038	-19.256	1.920	6.717
12	7.9563	7.9938	1.4030	5.849	6.526	.1877	.5834	.5535	.4340	.5919	.7230	-64.358	-19.738	.688	7.023
13	8.0669	8.0425	1.4193	5.827	6.550	.2159	.6022	.6019	.4176	.5745	.7241	-64.702	-20.176	-.654	7.581
14	8.1784	8.0937	1.4355	5.802	6.954	.2470	.6233	.6225	.4014	.5547	.7257	-65.075	-20.572	-2.138	8.402
15	8.2909	8.1480	1.4515	5.769	7.416	.2765	.6444	.6429	.3854	.5349	.7271	-65.479	-20.929	-3.733	9.444
16	8.4048	8.2061	1.4675	5.724	7.738	.3146	.6750	.6729	.3702	.5060	.7346	-65.915	-21.247	-5.252	10.631
17	8.5201	8.2704	1.4835	5.672	8.134	.3639	.7286	.7259	.3562	.4581	.7548	-66.378	-21.520	-6.383	11.882
18	8.6372	8.3449	1.4997	5.617	9.457	.4239	.7914	.7382	.3444	.4001	.7730	-66.856	-21.737	-7.075	13.086
19	8.7560	8.4310	1.5159	5.566	11.754	.4430	.8226	.8192	.3350	.3691	.7781	-67.340	-21.827	-7.722	13.863
20	8.8769	8.5310	1.5325	5.521	16.142	.4730	.8636	.8500	.3233	.3283	.7815	-67.826	-21.654	-8.565	13.859
21	9.0000	8.5699	1.5492	5.479	30.635	.5255	.9446	.9412	.3263	.2479	.7887	-68.316	-21.371	-9.607	13.159

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STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5199	7.6400	1.2248	-2.367	7.239	.3202	.4411	.4409	.2077	.7097	0.0000	48.317	-7.239	-39.941	.020
2	7.6655	7.6770	1.2380	-2.330	7.395	.3225	.4538	.4537	.2177	.7013	0.0000	48.010	-7.385	-37.422	.020
3	7.7107	7.7151	1.2475	-2.116	7.541	.3259	.4654	.4653	.2213	.6943	0.0000	47.187	-7.541	-34.669	.019
4	7.7547	7.7542	1.2527	-1.916	7.701	.3304	.4755	.4755	.2243	.6890	0.0000	46.548	-7.701	-31.756	.018
5	7.7974	7.7943	1.2541	-1.715	7.863	.3361	.4842	.4842	.2251	.6849	0.0000	46.057	-7.863	-28.741	.016
6	7.8393	7.8357	1.2523	-1.514	8.025	.3506	.4967	.4967	.2242	.6769	0.0000	45.679	-8.025	-25.670	.014
7	7.8805	7.8787	1.2477	-1.254	8.188	.3674	.5099	.5100	.2224	.6673	0.0000	45.358	-8.188	-22.597	.012
8	7.9216	7.9234	1.2395	-.873	8.350	.3833	.5232	.5232	.2208	.6591	0.0000	45.083	-8.350	-19.569	.010
9	7.9526	7.9699	1.2304	-.493	8.507	.3981	.5355	.5354	.2197	.6510	0.0000	44.853	-8.507	-16.519	.009
10	8.0036	8.0180	1.2205	-.100	8.653	.4030	.5409	.5407	.2165	.6435	0.0000	44.676	-8.653	-13.294	.007
11	8.0451	8.0673	1.2075	.825	8.782	.4047	.5471	.5466	.2160	.6488	0.0000	44.559	-8.782	-9.723	.005
12	8.0873	8.1181	1.1944	1.705	8.893	.4069	.5534	.5530	.2136	.6473	0.0000	44.522	-8.893	-5.874	.003
13	8.1303	8.1699	1.1807	2.538	8.981	.3946	.5500	.5495	.2159	.6551	0.0000	44.607	-8.981	-2.061	.001
14	8.1745	8.2223	1.1651	3.410	9.040	.3782	.5451	.5445	.2175	.6642	0.0000	44.846	-9.040	1.414	-.001
15	8.2139	8.2752	1.1490	4.247	9.062	.3606	.5394	.5387	.2197	.6734	0.0000	45.198	-9.062	4.865	-.004
16	8.2672	8.3284	1.1331	5.643	9.059	.3352	.5294	.5286	.2216	.6875	0.0000	45.579	-9.059	9.159	-.007
17	8.3176	8.3819	1.1159	8.373	9.059	.3099	.5211	.5202	.2220	.7024	0.0000	45.931	-9.059	15.261	-.012
18	8.3733	8.4358	1.0964	11.664	9.084	.2829	.5097	.5083	.2200	.7195	0.0000	46.474	-9.084	23.074	-.018
19	8.4355	8.4900	1.0751	13.384	9.125	.2702	.4951	.4943	.2105	.7343	0.0000	47.542	-9.125	31.492	-.024
20	8.5085	8.5447	1.0443	16.159	9.169	.2583	.4730	.4726	.1932	.7543	0.0000	49.059	-9.169	39.458	-.031
21	8.6199	8.6000	.9975	25.311	9.213	.2455	.4313	.4316	.1508	.7933	0.0000	50.514	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	0.0	3.0	11.0	13.0	14.0	25.6	26.3	26.3
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.5	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	0.0	3.0	11.0	13.0	14.0	25.5	26.3	26.3

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 26

TEST POINT TITLE = 301240915602

FLOW = 26.21 SPEED = 20781.1 PRESSURE RATIO = 2.773 ISENTROPIC EFFY = .6663 POLYTROPIC EFFY = .7095 DEL T/T = .5050

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	ISEN EFFY	----STAGE---- PRESSURE RATIO	ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301240915602	CONVERGED AFTER 26 PASSES	25.205	20781.1	3.462	.639	2.773	.666	.68647

APPENDIX B

COMPUTER INPUT DATA FOR DATA REDUCTION

KEY

SECTION 1. Common Phase I Data

SECTION 2. Common Phase II Fixed Data
(Log 1) Across Blade

SECTION 3. Common Phase II Input and Test Point Data
(Log 3, Log 4) Across Blade

SECTION 4. Common Phase II Fixed Data
(Log 1) Within Blade

SECTION 5. Common Phase II Input and Test Point Data
(Log 3, Log 4) Within Blade

SECTION 6. Individual Test Input Data

a. Exceptions to Section 1 Data
(indicated by (1))

b. Exceptions to Section 2 Data
(indicated by (2))

c. Exceptions to Section 3 Data
(indicated by (3))

d. Exceptions to Section 4, Data
(indicated by (4))

e. Exceptions to Section 5 Data
(indicated by (5))

SECTION 1. COMMON PHASE I DATA

BASIC DATA DECK

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    .2219     .2384     .2561     .2749     .2949     .3162     .3388     .3628
    .3883     .4153     .4440     .4744     .5067     .5409     .5772     .6157
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     -.79236516E-12         .22724403E-15
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141 143 145 147
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241 243 245 247
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301 303 305 307 309 311 313 315 317 319 321 323 325 327 329 331 333 335 337 339
341 343 345 347
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401 403 405 407 409 411 413 415 417 419 421 423 425 427 429 431 433 435 437 439
441 443 445 447
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  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20
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    .0029     .0031     .0034     .0036     .0038     .0041     .0043     .0045
    .0048     .0050     .0052     .0054     .0057     .0059     .0061     .0063
    .0065     .0068     .0070     .0072     .0074     .0076     .0079     .0081
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 780.0000  790.0000  800.0000  810.0000  820.0000  830.0000  840.0000  850.0000
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   7.0000     7.5600      8.1200      9.2000      8.4400
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339 409 419 429 439
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 11   7
131 133 135 137 139 209 211
 12   3
305 307 309
 13   3
  1
143 145 147
  1
243 245 247

  1
343 345 347
  1
443 445 447
 14   2
223 221
 15   2
109 111
 16   2
101 201
 99  50
  1

 OTHER DATA
   0   1   1
(1)  14.2200   15.0000   30.0000
       .5000     .5000     .5000


 EDITING DATA DECK
   0
```

SECTION 2. COMMON PHASE II FIXED DATA (LOG 1)
ACROSS BLADE

FIXED CATA PRINTOUT

OVERALL RUN TITLE

NUMBER OF STATIONS	=	10
NUMBER OF STREAMLINES	=	21
MAXIMUM NUMBER OF ITERATIONS	=	40
MAXIMUM NUMBER OF ARBITRARY ITERATIONS	=	15
TOTAL PRESSURE SOURCE INDICATOR	=	0
TOTAL TEMPERATURE SOURCE INDICATOR	=	0
STATION NUMBER FOR ROTOR EXIT DATA	=	7
STATION NUMBER FOR STAGE EXIT DATA	=	9
NUMBER OF ROTOR BLADES	=	30
NUMBER OF STATOR BLADES	=	49
MAXIMUM NUMBER OF LINES PER PAGE	=	60
NPLOT	=	3

ANNULUS SPECIFICATION

STATION 1 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.0636	-1.8000
9.0900	-1.30[illegible]

STATION 2 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.3740	-1.0000
9.0900	-1.0000

STATION 3 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.6015	-.4000
9.0900	-.4000

STATION 4 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.7500	0.0000
9.0500	0.0000

STATION 5 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.2499	2.0000
8.5699	2.0000

STATION 6 SPECIFIED BY 6 POINTS

RSTN	XSTN
7.3746	2.2000
7.8000	2.3350
8.0000	2.3950
8.2000	2.4030
8.4000	2.3500
8.5333	2.2000

STATION 7 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.3133	2.5000
7.7042	2.6593
7.8730	2.8402
8.0049	2.9252
8.1427	2.9431
8.2873	2.8935
8.4401	2.7655
8.6199	2.5000

STATION 8 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5400	4.7250
8.5000	4.7250

STATION 9 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.6400	5.4000
8.6000	5.4000

STATION 10 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5400	7.0000
8.5000	7.0000

STATION CALCULATION SPECIFICATION AND BLADING DATA

STATION 2 NCALC = 0 NDATA = -0 NBL =-0

STATION 3 NCALC = 0 NDATA = -0 NBL =-0

(2) STATION 4 NCALC = 1 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
6.7586	-62.0011	6.0825	.01450	.2192
6.9366	-62.2938	6.2936	.01420	.2168
7.0504	-62.5601	6.4195	.01410	.2144
7.2131	-62.8379	6.2846	.01390	.2120
7.3660	-63.0939	5.7818	.01370	.2097
7.5216	-63.3790	4.6992	.01350	.2078
7.6770	-63.7062	3.6317	.01330	.2062
7.8345	-64.0815	2.0453	.01320	.2052
7.9927	-64.5112	.2586	.01320	.2048
8.1529	-65.0037	-1.7858	.01330	.2051
8.3143	-65.5623	-4.0672	.01340	.2061
8.4791	-66.1881	-5.0474	.01360	.2078
8.6462	-66.8700	-7.1213	.01380	.2101
8.8166	-67.5766	-8.1121	.01420	.2127
8.9900	-68.2887	-9.5200	.01450	.2157

(2) STATION 5 NCALC = 4 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5585	-11.0761	10.9221	.04437	-.1061
7.6197	-12.5921	10.3557	.04309	-.1076
7.6839	-14.1312	9.3776	.04185	-.1091
7.7508	-15.6950	8.1112	.04100	-.1104
7.8204	-17.1350	7.1593	.04024	-.1116
7.8926	-18.3596	6.6712	.03956	-.1127
7.9673	-19.3791	6.8211	.03882	-.1138
8.0442	-20.2566	7.6047	.03806	-.1151
8.1233	-21.0485	8.9547	.03752	-.1165
8.2047	-21.7990	10.6021	.03690	-.1182
8.2882	-22.4622	12.2000	.03635	-.1202
8.3739	-23.0490	13.4357	.03584	-.1226
8.4623	-23.4032	13.9543	.03545	-.1252
8.5549	-23.4990	13.7640	.03496	-.1279
8.6596	-23.4258	13.2395	.03437	-.1307

(2) STATION 6 NCALC = 0 NDATA = 0 NBL = 0

(2) STATION 7 NCALC = 1 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5440	55.1561	-43.7538	.01614	-.1043
7.6595	53.5860	-37.7735	.01723	-.0952
7.7776	49.8380	-30.1445	.01536	-.0847
[illegible]	47.1407	-21.[illegible]	.01445	-.0772
8.0211	45.3735	-11.6297	.01392	-.0727
8.1454	44.4992	-.6196	.01356	-.0710
8.2714	44.6432	9.6089	.01338	-.0722
8.3997	45.8152	26.7782	.01333	-.0770
8.5330	49.5928	41.5535	.01370	-.0882
8.6721	54.4829	48.7546	.01130	-.1047

STATION 8 NCALC = 3 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	-6.7608	.0181	.00994	.0001
7.6250	-7.1856	.0202	.00979	.0001
7.7500	-7.6868	.0180	.00964	.0001
7.8750	-8.1755	.0121	.00950	.0001
8.0000	-8.5005	.0076	.00936	0.0000
8.1250	-8.9062	.0030	.00923	0.0000
8.2500	-9.0563	-.0025	.00910	0.0000
8.3750	-9.0583	-.0113	.00896	0.0000
8.5000	-9.1339	-.0255	.00884	.0001
8.6250	-9.2331	-.0416	.00873	.0001

(2) STATION 9 NCALC = 0 NDATA = 0 NBL = 1

STATION 10 NCALC = 0 NDATA = 0 NBL = 1

ROTOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 2 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0000

OUTLET RADIUS = 0.0000

M-COORD	DEVIATION ANGLE (DEGREES)
0.0000	0.0000
1.0000	1.0000

STATOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 2 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0000

OUTLET RADIUS = 0.0000

M-COORD	DEVIATION ANGLE (DEGREES)
0.0000	0.0000
1.0000	1.0000

NUMBER OF TEST POINTS TO BE ANALYSED = 4

(3) PSCALE= 4.00 PLOWER= 12.00 CAMFF= 4.000 NSAVE= 1 NNMAX= 0 MFORCE= 0 NEX= 2

SECTION 3. COMMON PHASE II INPUT AND TEST POINT DATA (LOG 3, LOG 4) WITHIN BLADE

TEST DATA PRINTOUT FOR POINT NO. 1

TEST POINT TITLE

GAS CONSTANT	= 53.4631
AIR MASS FRACTION	= .99627
FLOWRATE	= 25.6329
ROTOR SPEED	= 20410.0
INLET TOTAL PRESSURE	= 14.6960
INLET TOTAL TEMPERATURE	= 518.688
T IN/T IN(STD)	= .95350
P IN/P IN(STD)	= .20200

ROTOR OUTLET TOTAL PRESSURE (5 POINTS)

RADIUS	PRESSURE
7.8710	50.6306
8.0010	50.0374
8.1210	48.7050
8.2510	47.1338
8.3710	46.1951

ROTOR OUTLET TOTAL TEMPERATURE (5 POINTS)

RADIUS	TEMPERATURE
7.8710	749.170
8.0010	750.254
8.1210	755.174
8.2510	765.757
8.3710	793.239

STAGE OUTLET TOTAL PRESSURES (5 POINTS)

RADIUS	MEAN PRES	PEAK PRES
7.8000	41.2973	45.6978
7.9500	39.2335	43.5872
8.1200	36.2137	42.3691
8.2800	38.7250	42.5721
8.4400	39.7649	44.1213

STAGE OUTLET TOTAL TEMPERATURES (5 POINTS)

RADIUS	TEMPERATURE
7.8000	753.615
7.9500	761.359
8.1200	763.595
8.2800	775.233
8.4400	774.937

STAGE OUTLET FLOW ANGLES (1 POINTS)

RADIUS	ANGLE
0.0000	0.000

CASING STATIC PRESSURES (14 POINTS)

X-COORD	PRESSURE
-2.0000	13.4804
-.2500	13.4540
0.0000	13.7632
.2500	14.4438
.5000	16.7940
.7500	18.0131
1.0000	20.3644
1.2500	23.8027
1.5000	24.5302
1.7500	25.2123
2.0000	26.3941
2.2500	26.7330
4.7250	27.8993
6.1910	27.3993

HUB STATIC PRESSURES (5 POINTS)

X-COORD	PRESSURE
-2.0000	13.6635
-.2500	13.0121
2.2500	24.2955
4.7250	27.4607
6.1310	27.4607

DISTRIBUTED BLOCKAGE SPECIFICATION

(3)

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ACC.DEVA.	DISTRIBUTION FACTOR	FRACTION TE BLOCKAGE
1	0.00000	1.0000	-0.000	-0.0000	-0.0000
2	0.00000	1.0000	-0.000	-0.0000	-0.0000
3	0.00000	1.0000	-0.000	-0.0000	-0.0000
4	0.00000	1.0000	-0.000	-0.0000	-0.0000
5	.05000	0.0000	-0.000	-0.0000	-0.0000
6	.05000	0.0000	-0.000	-0.0000	-0.0000
7	.10000	1.0000	-0.000	-0.0000	-0.0000
8	.26000	1.0000	-0.000	-0.0000	-0.0000
9	.05400	1.0000	-0.000	-0.0000	-0.0000
10	.05400	1.0000	-0.000	-0.0000	-0.0000

SOLUTION TYPE INDICATORS

(3)

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

NJUMP= 0

SECTION 4. COMMON PHASE II FIXED DATA (LOG 1)
WITHIN BLADE

```
FIXED DATA PRINTOUT
-------------------

     OVERALL RUN TITLE

     NUMBER OF STATIONS                                      = 17
     NUMBER OF STREAMLINES                                   = 21
     MAXIMUM NUMBER OF ITERATIONS                            = 60
     MAXIMUM NUMBER OF ARBITRARY ITERATIONS                  = 20
     TOTAL PRESSURE SOURCE INDICATOR                         =  0
     TOTAL TEMPERATURE SOURCE INDICATOR                      =  0
     STATION NUMBER FOR ROTOR EXIT DATA                      = 11
     STATION NUMBER FOR STAGE EXIT DATA                      = 16
     NUMBER OF ROTOR BLADES                                  = 30
     NUMBER OF STATOR BLADES                                 = 49
     MAXIMUM NUMBER OF LINES PER PAGE                        = 60
     NPLOT                                                   =  2

     ANNULUS SPECIFICATION

     STATION  1 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       6.0635         -1.6000
       9.0900         -1.6000

     STATION  2 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       6.3746         -1.0000
       9.0900         -1.0000

     STATION  3 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       6.5016          -.4000
       9.0500          -.4000

     STATION  4 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       6.7500          0.0000
       9.0000          0.0000

     STATION  5 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       6.8879           .4000
       8.9340           .4000

     STATION  6 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       7.0784           .8000
       8.9573           .8000

     STATION  7 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       7.2620          1.2000
       8.8019          1.2000

     STATION  8 SPECIFIED BY  2 POINTS

       RSTN            XSTN

       7.4492          1.6000
       8.7359          1.6000
```

STATION 9 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5439	2.0000
8.6699	2.0000

STATION 10 SPECIFIED BY 6 POINTS

RSTN	XSTN
7.5746	2.2000
7.8000	2.3350
8.0000	2.3950
8.2000	2.4030
8.4000	2.3500
8.6399	2.2000

STATION 11 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.5139	2.5000
7.7472	2.6938
7.8730	2.8402
8.0049	2.9262
8.1427	2.9491
8.2873	2.8996
8.4401	2.7656
8.6199	2.5000

STATION 12 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.7150	3.0659
7.8336	3.2061
7.9410	3.3114
8.0550	3.3759
8.1746	3.3931
8.2934	3.3560
8.4257	3.2554
8.5730	3.0678

STATION 13 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.7230	3.6189
7.8456	3.7124
7.9538	3.7825
8.0656	3.8256
8.1885	3.8370
8.3126	3.8123
8.4337	3.7453
8.5795	3.6202

STATION 14 SPECIFIED BY 3 POINTS

RSTN	XSTN
7.6720	4.1720
8.1900	4.2810
8.5900	4.1726

STATION 15 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5490	4.7250
8.6000	4.7250

STATION 16 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5400	5.4000
8.5800	5.4000

STATION 17 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.6400	7.0800
8.6000	7.0000

STATION CALCULATION SPECIFICATION AND BLADING DATA

STATION 2 NCALC = 0 NDATA = -0 NBL =-0

STATION 3 NCALC = 0 NDATA = -0 NBL =-0

STATION 4 NCALC = 1 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
6.7586	-62.0011	6.0825	.01450	.2192
6.9086	-62.2938	6.2938	.01420	.2168
7.0604	-62.5801	6.4195	.01410	.2144
7.2131	-62.8379	6.2846	.01390	.2120
7.3668	-63.0939	5.7818	.01370	.2097
7.5216	-63.3790	4.8992	.01350	.2078
7.6776	-63.7062	3.6317	.01330	.2062
7.8345	-64.0816	2.0493	.01320	.2052
7.9927	-64.5112	.2588	.01320	.2048
8.1529	-65.0037	-1.7858	.01330	.2051
8.3148	-65.5623	-4.0672	.01340	.2061
8.4791	-66.1881	-6.0474	.01360	.2078
8.6462	-66.8700	-7.1213	.01380	.2101
8.8166	-67.5768	-8.1121	.01420	.2127
8.9300	-68.2887	-9.5200	.01450	.2157

(4) STATION 5 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
6.9066	-60.4843	4.2528	.11660	.1095
7.0443	-60.8164	4.1868	.11320	.1081
7.1829	-61.1343	3.7778	.10980	.1067
7.3217	-61.4067	3.1230	.10630	.1056
7.4607	-61.6313	2.6462	.10280	.1046
7.5999	-61.8603	2.2043	.09960	.1038
7.7397	-62.1272	1.6392	.09670	.1032
7.8799	-62.4467	1.0024	.09450	.1028
8.0211	-62.8331	.3683	.09280	.1026
8.1640	-63.3022	-.3192	.09160	.1026
8.3088	-63.8650	-1.0951	.09100	.1028
8.4564	-64.5226	-1.7009	.09140	.1032
8.6074	-65.2580	-1.8276	.09230	.1038
8.7629	-66.0375	-2.1796	.09340	.1044
8.9231	-66.8394	-3.0445	.09450	.1052

(4) STATION 6 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.0871	-54.7286	2.4431	.15180	.0157
7.2111	-55.0830	2.1140	.14700	.0150
7.3352	-55.4640	1.2241	.14230	.0145
7.4588	-55.8124	.1217	.13780	.0143
7.5820	-56.0634	-.2912	.13350	.0143
7.7051	-56.3007	-.3032	.12940	.0144
7.8282	-56.5794	-.2037	.12580	.0145
7.9512	-56.9187	.0605	.12290	.0145
8.0748	-57.3364	.5445	.12060	.0145
8.1994	-57.8549	1.1927	.11880	.0142
8.3253	-58.4881	1.9451	.11770	.0138
8.4530	-59.2396	2.8362	.11760	.0132
8.5835	-60.[illegible]	3.9074	.11820	.0123
8.7176	-60.9981	4.6308	.11890	.0111
8.8562	-61.9604	4.9033	.11960	.0098

(4) STATION 7 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.2700	-42.9530	1.4890	.20936	-.0504
7.3758	-43.2904	1.0452	.19685	-.0507
7.4805	-43.8701	.0200	.18715	-.0509
7.5846	-44.4575	-1.1013	.17888	-.0507
7.6885	-44.9081	-1.2450	.17166	-.0504
7.7925	-45.3255	-.7671	.16513	-.0502
7.8972	-45.7857	-.0043	.15950	-.0501
8.0023	-46.3129	1.0785	.15419	-.0502
8.1083	-46.9235	2.5041	.15016	-.0506
8.2157	-47.6575	4.1911	.14656	-.0514
8.3246	-48.4393	6.0132	.14416	-.0526
8.4355	-49.4393	7.7920	.14275	-.0542
8.5492	-50.4285	9.3300	.14233	-.0562
8.6607	-51.3985	10.3001	.14225	-.0586
8.7334	-52.3297	10.8437	.14220	-.0612

(4) STATION 8 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.4500	-24.5339	2.8700	.16500	-.0886
7.5291	-25.5755	2.8220	.15501	-.0891
7.6093	-26.6033	2.1498	.14656	-.0896
7.6907	-28.0303	1.2496	.13967	-.0899
7.7738	-29.1233	1.1645	.13377	-.0901
7.8587	-30.0294	1.6595	.12853	-.0904
7.9455	-30.8586	2.5576	.12381	-.0907
8.0340	-31.5333	3.3882	.11927	-.0914
8.1243	-32.4730	5.6399	.11547	-.0923
8.2167	-33.3295	7.6545	.11220	-.0935
8.3110	-34.2257	9.7467	.10980	-.0954
8.4075	-35.1518	11.5906	.10801	-.0975
8.5071	-35.9858	12.8628	.10689	-.1001
8.6110	-36.7200	13.3143	.10601	-.1029
8.7225	-37.3409	13.2525	.10507	-.1050

(4) STATION 9 NCALC = 4 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5585	-11.0751	10.9221	.04437	-.1061
7.6197	-12.5921	10.3557	.04309	-.1076
7.6839	-14.1312	9.3775	.04185	-.1091
7.7508	-15.5950	8.1113	.04100	-.1104
7.8204	-17.1350	7.1593	.04024	-.1116
7.8926	-18.3596	6.6712	.03956	-.1127
7.9673	-19.3731	6.8211	.03882	-.1138
8.0442	-20.2556	7.6047	.03806	-.1151
8.1233	-21.0448	8.9547	.03752	-.1165
8.2047	-21.7990	10.6021	.03690	-.1182
8.2882	-22.4822	12.2003	.03635	-.1202
8.3739	-23.0450	13.4357	.03584	-.1226
8.4623	-23.4032	13.9543	.03545	-.1252
8.5549	-23.4330	13.7549	.03496	-.1279
8.6556	-23.4253	13.2395	.03437	-.1307

STATION 10 NCALC = 0 NDATA = -0 NBL = 1

STATION 11 NCALC = 1 NDATA = 10 NBL =-0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5440	55.1551	-43.7538	.01614	-.1083
7.6595	53.5850	-37.7735	.01723	-.0952
7.7775	48.3380	-30.1445	.01536	-.0847
7.8985	47.1407	-21.2081	.01445	-.0773
8.0211	45.3735	-11.8297	.01392	-.0727
8.1454	44.4992	-.3199	.01358	-.0710
8.2714	44.5432	9.6089	.01338	-.0722
8.3997	45.8152	26.7782	.01333	-.0770
8.5330	49.5925	41.5535	.01370	-.0832
8.6721	54.4529	48.7540	.01130	-.1047

STATION 12   NCALC = 2   NDATA = 10   NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5113	34.7293	-25.7556	.11858	-.0549
7.6334	33.9362	-26.3943	.10511	-.0470
7.7560	32.8982	-23.2637	.09202	-.0394
7.8795	31.3971	-16.2152	.08062	-.0337
8.0036	30.4237	-9.4954	.07350	-.0301
8.1283	29.8951	-2.9737	.06992	-.0284
8.2534	29.8235	3.3793	.06961	-.0285
8.3789	30.3733	12.2206	.07270	-.0305
8.5053	32.4775	23.1254	.08078	-.0353
8.6330	35.6328	32.3432	.09245	-.0432

STATION 13   NCALC = 2   NDATA = 10   NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5009	16.6561	-9.9376	.12611	-.0156
7.6256	16.3979	-10.2994	.11167	-.0127
7.7504	16.0640	-9.0207	.09770	-.0098
7.8752	15.9238	-6.7565	.08599	-.0076
8.0001	15.7355	-3.7730	.07831	-.0061
8.1251	15.8033	-1.1768	.07436	-.0055
8.2501	15.9516	.5493	.07368	-.0054
8.3751	16.0597	2.9555	.07641	-.0059
8.5002	16.7361	6.0849	.08323	-.0070
8.6254	17.8003	10.0593	.09466	-.0091

STATION 14   NCALC = 2   NDATA = 10   NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	4.4731	-1.0973	.08357	.0024
7.6250	4.1107	-1.1011	.07496	.0027
7.7500	3.6830	-.9168	.06672	.0030
7.8750	3.3057	-.6527	.06023	.0032
8.0000	2.9953	-.4587	.05577	.0034
8.1250	2.8012	-.3036	.05325	.0035
8.2501	2.7567	-.1369	.05270	.0035
8.3751	2.8770	-.3981	.05419	.0036
8.5001	3.1370	-.8345	.05797	.0037
8.6251	3.6112	-1.0923	.06461	.0040

STATION 15   NCALC = 3   NDATA = 10   NBL = 1

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	-6.7608	.0181	.00994	.0001
7.6250	-7.1856	.0202	.00979	.0001
7.7500	-7.6868	.0180	.00964	.0001
7.8750	-8.1755	.0121	.00950	.0001
8.0000	-8.6005	.0076	.00936	0.0000
8.1250	-8.9062	.0030	.00923	0.0000
8.2500	-9.0553	-.0026	.00910	0.0000
8.3750	-9.0583	-.0113	.00896	0.0000
8.5000	-9.1338	-.0255	.00884	.0001
8.6250	-9.2331	-.0418	.00873	.0001

STATION 16   NCALC =-0   NDATA = -0   NBL = 1

STATION 17   NCALC =-0   NDATA = -0   NBL = 1

ROTOR GENERALISED PERFORMANCE   LOSS 2 POINTS   DEVIATION 3 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0010

(4) OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

```
(4)  OUTLET RADIUS =  7.7343
              M-COORD   DEVIATION ANGLE (DEGREES)
               .2000          -5.0750
               .4000          -4.5420
               .8000          -4.7060
(4)  OUTLET RADIUS =  7.9385
              M-COORD   DEVIATION ANGLE (DEGREES)
               .2000          -5.1000
               .4000          -4.2030
               .8000          -4.6500
(4)  OUTLET RADIUS =  8.1919
              M-COORD   DEVIATION ANGLE (DEGREES)
               .2000          -5.3750
               .4000          -5.7420
               .8000          -6.5890
(4)  OUTLET RADIUS =  8.6599
              M-COORD   DEVIATION ANGLE (DEGREES)
               .2000          -5.3250
               .4000         -12.3300
               .8000         -25.0850
     STATOR GENERALISED PERFORMANCE   LOSS  2 POINTS  DEVIATION  6 POINTS
              M-COORD  LOSS COEFF/TOTAL LOSS COEFF
              0.0000           0.0000
              1.0000           1.0000
     OUTLET RADIUS =  0.0000
              M-COORD   DEVIATION ANGLE (DEGREES)
              0.0000           .1000
               .2000           .1100
               .4000           .1500
               .6000           .2200
               .8000           .3800
              1.0000          1.0000
     NUMBER OF TEST POINTS TO BE ANALYSED =   1
(5)  PSCALE= 1.00 PLOWER= 14.00 DAMPF=  5.000 NSAVE= 1 NNMAX= -0 MFORCE= -0 NEX= 2
```

SECTION 5. COMMON PHASE II INPUT AND TEST POINT DATA (LOG 3, LOG 4) WITHIN BLADE

TEST DATA PRINTOUT FOR POINT NO. 1

TEST POINT TITLE

GAS CONSTANT	=	53.5218
AIR MASS FRACTION	=	.99446
FLOWRATE	=	13.8351
ROTOR SPEED	=	10195.8
INLET TOTAL PRESSURE	=	14.6960
INLET TOTAL TEMPERATURE	=	518.685
T IN/T IN(STD)	=	.96970
P IN/P IN(STD)	=	.98610

ROTOR OUTLET TOTAL PRESSURE (5 POINTS)

RADIUS	PRESSURE
7.8710	20.5335
8.0010	20.5538
8.1210	20.7564
8.2510	20.7576
8.3710	20.7773

ROTOR OUTLET TOTAL TEMPERATURE (5 POINTS)

RADIUS	TEMPERATURE
7.8710	572.227
8.0010	572.272
8.1210	573.975
8.2510	574.431
8.3710	579.030

STAGE OUTLET TOTAL PRESSURES (5 POINTS)

RADIUS	MEAN PRES	PEAK PRES
7.8000	20.1302	20.6143
7.9500	20.0819	20.5603
8.1200	20.1487	20.7571
8.2800	20.2026	20.6909
8.4400	20.1297	20.4992

STAGE OUTLET TOTAL TEMPERATURES (5 POINTS)

RADIUS	TEMPERATURE
7.8000	573.687
7.9500	574.153
8.1200	575.339
8.2800	577.637
8.4400	573.322

STAGE OUTLET FLOW ANGLES (1 POINTS)

RADIUS	ANGLE
0.0000	0.000

CASING STATIC PRESSURES (14 POINTS)

X-COORD	PRESSURE
-2.0000	14.4017
-.2500	14.3057
0.0000	14.4173
.2500	14.7776
.5000	15.1334
.7500	15.6129
1.0000	15.6857
1.2500	15.9153
1.5000	16.5372
1.7500	16.8434
2.0000	16.3653
2.2500	16.5537
4.7250	17.7205
5.1510	17.7205

HUB STATIC PRESSURES (5 POINTS)

X-COORD	PRESSURE
-2.0000	14.4513
-.2500	14.3257
2.2500	16.3502
4.7250	17.6349
6.1810	17.6348

(5) DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.	DISTRIBUTION FACTOR	FRACTION TE BLOCKAGE
1	0.00000	1.0000	-0.000	-0.0000	-0.0000
2	0.00000	1.0000	-0.000	-0.0000	-0.0000
3	0.00000	1.0000	-0.000	-0.0000	-0.0000
4	0.00000	1.0000	-0.000	-0.0000	-0.0000
5	0.00000	.8000	.010	1.0000	.2000
6	.00100	.6000	.010	1.0000	.4000
7	.00300	.4000	.010	1.0000	.6000
8	.01000	.2000	.010	1.0000	.8000
9	.03600	0.0000	.010	1.0000	1.0000
10	.02000	0.0000	-0.000	-0.0000	-0.0000
11	.03000	1.0000	-0.000	-0.0000	-0.0000
12	.11000	1.0000	-0.000	-0.0000	-0.0000
13	.13000	1.0000	-0.000	-0.0000	-0.0000
14	.14000	1.0000	-0.000	-0.0000	-0.0000
15	.10000	1.0000	-0.000	-0.0000	-0.0000
16	.10000	1.0000	-0.000	-0.0000	-0.0000
17	.10000	1.0000	-0.000	-0.0000	-0.0000

(5) SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

NJUMP= 0

SECTION 6. INDIVIDUAL TEST INPUT DATA

a. EXCEPTIONS TO SECTION 1 DATA
(Indicated by (1))

Test Point Number	Exception (1)
212050109840	14.1590
212050213440	"
212050315040	"
212050415940	"
212050516240	"
212050616440	"
212050615050	14.1590
212050815750	"
212050916250	"
212051015050	"
212051114250	"
212051212250	"
212051415060	"
212051514360	"
212051612960	"
212051715560	"
212051815960	"
212051916360	"
212070215070	14.5035
212070314770	"
212070615070	"
212070715670	"
212070815970	"
212070916170	"
212071015080	14.5035
212071315080	"
212071415580	"
212071515980	"
301180915685	14.2208
301181015885	"
301180615085	"
301180815385	"
301181515590	14.2208
301181615790	"
301181715890	"
301181415290	"

301230615095	5.0097	15.0097	15.00	30.00
301230415395	""	""	""	""
301230515695	""	""	""	""
301231515600	5.0097	15.0097	15.00	30.00
301231615700	""	""	""	""
301231315200	""	""	""	""
301231415400	""	""	""	""
301240815302	""	""	""	""
301240915602	""	""	""	""

b. EXCEPTIONS TO SECTION 2 DATA
(Indicated by (2))

Test Point 212050109840

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050213440

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050315040

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050415940

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 21205016240

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050616440

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050615050

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050815750

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050916250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051015050

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051114250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051212250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051415060

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051514360

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051612960

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051715560

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051815960

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051916360

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070215070

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070314770

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070615070

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070715670

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070815970

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070916170

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071015080

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071315080

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071415580

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071515980

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 301180915685

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301181015885

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301180615085

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301180815385

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301181515590

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181615790

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181715890

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181415290

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230615095

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230415395

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230515695

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231515600

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231615700

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231315200

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231415400

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301240815[illegible]02

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301240915602

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

c. EXCEPTIONS TO SECTION 3 DATA
(indicated by (3))

Test Point 212050109840

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.00

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.05650~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050213440

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.00

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.09000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	6	7	~~8~~	~~9~~	~~10~~
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050315040

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.09000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

STATION	1	2	~~3~~	~~4~~	5	6	7	~~8~~	~~9~~	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050415940

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.09000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050516240

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.09000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050616440

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.09000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	6	7	~~8~~	~~9~~	~~10~~
NMACH	0	0	-0	-C	-0	-0	-0	-0	-0	-0

Test Point 212050615050

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	.5000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~
NMACH	0	0	-0	-C	-0	-0	-0	-0	-0	-C

Test Point 212050815750

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	.5000
~~6~~	~~.00000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050916250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	.5000
~~6~~	~~.00000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051015050

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	.5000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051114250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.0000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

~~SOLUTION TYPE INDICATORS~~

~~STATION~~	~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	~~9~~	~~10~~
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051212250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.19000	0.0000
6	.00[illegible]	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Pooint 212051415060

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	[illegible]	0.0000
6	.080[illegible]	0.0000
7	.08000	1.0000
8	.054[illegible]	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051514360

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

~~DISTRIBUTED BLOCKAGE SPECIFICATION~~

~~STATION~~	~~BLOCKAGE~~	~~DISTRIBUTION FACTOR~~
~~1~~	~~0.00000~~	~~1.0000~~
2	0.00000	1.0000
~~3~~	~~0.00000~~	~~1.0000~~
4	0.00000	1.0000
~~5~~	~~.00000~~	~~0.0000~~
6	.08000	0.0000
~~7~~	~~.00000~~	~~1.0000~~
8	.05400	1.0000
~~9~~	~~.05400~~	~~1.0000~~
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
~~NMACH~~	~~0~~	~~0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~

Test Point 212051612960

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

~~DISTRIBUTED BLOCKAGE SPECIFICATION~~

~~STATION~~	~~BLOCKAGE~~	~~DISTRIBUTION FACTOR~~
~~1~~	~~0.00000~~	~~1.0000~~
2	0.00000	1.0000
~~3~~	~~0.00000~~	~~1.0000~~
4	0.00000	1.0000
~~5~~	~~.00000~~	~~0.0000~~
6	.08000	0.0000
~~7~~	~~.00000~~	~~1.0000~~
8	.05400	1.0000
~~9~~	~~.05400~~	~~1.0000~~
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
~~NMACH~~	~~0~~	~~0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~

Test Point 212051715560

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051815960

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051916360

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

~~DISTRIBUTED BLOCKAGE SPECIFICATION~~

~~STATION~~	~~BLOCKAGE~~	~~DISTRIBUTION FACTOR~~
~~1~~	~~0.00000~~	~~1.0000~~
2	0.00000	1.0000
~~3~~	~~0.00000~~	~~1.0000~~
4	0.00000	1.0000
~~5~~	~~.08000~~	~~0.0000~~
6	.08000	0.0000
~~7~~	~~.08000~~	~~1.0000~~
8	.05400	1.0000
~~9~~	~~.05400~~	~~1.0000~~
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
~~NMACH~~	~~0~~	~~0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~	~~-0~~

Test Point 212070215070

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.0000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070314770

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070615070

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.0000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070715670

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.0000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

~~STATION~~	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070815970

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	1.0000
~~6~~	~~.08000~~	~~1.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

~~STATION~~	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070916170

PSCALE = 2.0 PLOWE. 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
~~4~~	~~0.00000~~	~~1.0000~~
5	.08000	0.5000
~~6~~	~~.08000~~	~~0.0000~~
7	.08000	1.0000
~~8~~	~~.05400~~	~~1.0000~~
9	.05400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071015080

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071315080

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071415580

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071515980

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30180615085

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30180815385

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301180915685

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30118105885

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181415290

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.27000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181515590

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181615790

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.25000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181715890

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.24000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230415395

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230515695

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.25000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230615095

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26500	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231315200

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.37[illegible]00	1.0000
8	.26[illegible]00	1.0000
9	.05400	1.0000
10	.0[illegible]	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231415400

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05[illegible]00	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.2[illegible]500	1.0000
9	.0[illegible]400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231515600

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231615700

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301240815302

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.03400	1.0000
~~10~~	~~.05400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301240915602

PSCALE = 4.0 PLOWER =12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
~~2~~	~~0.00000~~	~~1.0000~~
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.06750	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.03400	1.0000
~~10~~	~~.09400~~	~~1.0000~~

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

d. EXCEPTIONS TO SECTION 4 DATA
(Indicated by (4))

Test Point 212050315040

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.5433

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.0000
.4000	-8.7200
.6000	-9.3000
.8000	-8.0000

OUTLET RADIUS = 8.0331

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3000
.4000	-7.2000
.6000	-7.1000
.8000	-7.0000

OUTLET RADIUS = [illegible]

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.0000
.4000	-9.0000
.6000	-10.2000
.8000	-11.2000

Test Point 212050615050

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-9.0000
.4000	-8.7000
.6000	-8.3000
.8000	-8.0000

OUTLET RADIUS = 8.0331

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3000
.4000	-7.2000
.6000	-7.1000
.8000	-7.0000

OUTLET RADIUS = 8.5533

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.0000
.4000	-9.1000
.6000	-10.2000
.8000	-11.2000

Test Point 212051715560

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.8000
.4000	-7.9200
.6000	-7.1000
.8000	-6.2000

OUTLET RADIUS = 8.0235

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.4000
.4000	-7.1000
.6000	-6.8000
.8000	-5.4600

OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.7500
.4000	-9.0500
.6000	-10.3500
.8000	-11.6500

Test Point 212070815970

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	3

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9335

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

Test Point 212071515980

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	3

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9335

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301181015885

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.4750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301181715890

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.4750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301230515695

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	0
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

R-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

R-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.6750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

R-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.5000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

R-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.5750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

R-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.5250
.4000	-12.3300
.8000	-25.0850

Test Point 301231615700

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	0
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.7640
.4000	-5.2750
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.0730
.4000	-4.3750
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-3.9700
.4000	-4.1500
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-3.9600
.4000	-5.5750
.8000	-6.5690

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.7160
.4000	-11.7500
.8000	-24.0850

Test Point 301240915602

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9395

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

e. EXCEPTIONS TO SECTION 5 DATA
(indicated by (5))

Test Point 212050315040

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.00300	.8000	.010
6	.00700	.6000	.010
7	.01000	.4000	.010
8	.01400	.2000	.010
9	.01800	0.0000	.010
10	.03500	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.08000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 212050615050

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.00400	.8000	.010
6	.00800	.6000	.010
7	.01200	.4000	.010
8	.01600	.2000	.010
9	.02100	0.0000	.010
10	.03000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.08000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 212051715560

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.01000	.8000	.010
6	.02000	.6000	.010
7	.03100	.4000	.010
8	.04100	.2000	.010
9	.05100	0.0000	.010
10	.03000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.08000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 21207081[illegible]

PSCALE = 2.5   PLOWER = 12.5   DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.[illegible]	1.000[illegible]	-0.000
2	0.[illegible]000	1.[illegible]00	-0.000
3	[illegible].00000	1.[illegible]	-0.000
4	0.00000	1.[illegible]	-0.000
5	0.[illegible]	.[illegible]	.010
6	.[illegible]	.[illegible]	.010
7	.003[illegible]	.400[illegible]	.010
8	.010[illegible]	.200[illegible]	.010
9	.03[illegible]	0.0000	.010
10	.02[illegible]	0.0000	-0.000
11	.0[illegible]	1.0001	-0.000
12	.1[illegible]000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.[illegible]	1.0000	-0.000
16	.1[illegible]	1.000[illegible]	-0.000
17	.1[illegible]	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 21[illegible] 50

PSCALE = [illegible]   PLOWER = 12.5   DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.0[illegible]	1.00[illegible]	-0.000
2	[illegible].0[illegible]	1.0000	-0.000
3	[illegible]	1.0000	-0.000
4	[illegible]	1.0000	-0.000
5	[illegible]	.8[illegible]	.010
6	.0[illegible]	.600[illegible]	.010
7	.0[illegible]	.4000	.010
8	.0[illegible]	.2000	.010
9	.03[illegible]	0.0000	.010
10	.02[illegible]	0.0000	-0.000
11	.030[illegible]	1.0[illegible]	-0.000
12	.1[illegible]	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.1300[illegible]	1.0000	-0.000
16	.13[illegible]	1.0000	-0.000
17	.13[illegible]	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	[illegible]	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301181015885

PSCALE = 3.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301181715890

PSCALE = 3.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301230515695

PSCALE = 4.0   PLOWER = 12.0   DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05000	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.13000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301231615700

PSCALE = 4.0   PLOWER = 12.0   DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05000	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.13000	1.0000	-0.000
13	.15000	1.0000	-0.000
14	.17000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	1	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301240915602

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.03500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	1	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

APPENDIX C

ADDITIONAL CALCOMP PLOTTING ROUTINE LISTINGS

This appendix contains the program listings for the DEVPLOT and STAPLOT plotting routines. Section C1 contains the input format and program listing for DEVPLOT. Section C2 contains the input format and program listing for STAPLOT.

SECTION C1. DEVPLOT PROGRAM

a. INPUT DATA FORMAT

In the following chart, one line corresponds to one card except where noted. Values in parentheses indicate the input format for the corresponding variable.

NCASE (I6)	NPLOT (I6)	
[illegible] (I6)	[illegible] (I6)	Occurs NCase Times
[illegible] (F12.8)	ZY (F12.8) R (F12.8)	Occurs [illegible] Times
* II (I6)	JJ (I6)	

b. DEFINITION OF INPUT DATA ITEMS

NCASE — Number of Cases (Speed Points) to be Plotted

NPLOT — Plotting option. NPLOT = 1, Plots will be made. NPLOT = 0, No plots will be made.

[illegible] — Test Point Identification (Percent Design Speed)

[illegible] — Number of Input Deviation Angles to be Plotted for each [illegible]. (Includes Streamline, Computing Station and Corresponding Deviation Angle)

[illegible] — Deviation angle

[illegible] — Normalized Axial Distance

R — Radial Distance

II — Computing Station Number Corresponding to Phase II Calculations

JJ — Streamline Number Corresponding to Phase II Calculations

* Continuation of previous line.

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c. PROGRAM LISTING

```
      PROGRAM DEVPLOT(INPUT,OUTPUT,PLOT)
      DIMENSION DEVSGN(10,3),XX2(10,3),R(10,3),II(10,3),JJ(10,3)
      READ 10,NCASE,NPLOT
   10 FORMAT (2I6)
      PRINT 20,NCASE,NPLOT
   20 FORMAT (1H1,10X,26HROTOR THRU-BLADE DEVIATION,//,10X,17HNUMBER OF
     1CASES =,I3,//,10X,7HNPLOT =,I2)
      M=1
   30 READ 40,NSPEED,NPOINTS
   40 FORMAT (2I6)
      PRINT 50,NSPEED,NPOINTS
   50 FORMAT (1H1,10X,12HTEST SPEED =,I4,1H%,//,10X,23HNUMBER OF DATA PO
     1INTS =,I3,/,2X)
      READ 60,((DEVSGN(I,J),XX2(I,J),R(I,J),II(I,J),JJ(I,J),J=1,3),I=1,6
     1)
   60 FORMAT (3F12.8,2I5)
      PRINT 70
   70 FORMAT(//,22X,10HNORMALIZED,/,11X,7HSTATION,2X,14HAXIAL DISTANCE,1
     1X,9HDEVIATION,2X,10HSTREAMLINE,3X,6HRADIUS,/,2X)
      DO 80 J=1,3
      DO 80 I=1,6
   80 XX2(I,J)=XX2(I,J)/2.0
      DO 100 J=1,3
      DO 100 I=1,6
      PRINT 90, II(I,J),XX2(I,J),DEVSGN(I,J),JJ(I,J),R(I,J)
   90 FORMAT (10X,I6,3X,F10.2,4X,F10.4,3X,I6,3X,F10.4)
  100 CONTINUE
      IF(NPLOT.EQ.0)GO TO 150
      CALL PLOT(0.0,-12.0,-3)
      CALL PLOT(3.0,2.0,-3)
      CALL AXIS(0.,0.,25HNORMALIZED AXIAL DISTANCE,-25,5.,0.,0.,.2)
      CALL AXIS(0.,0.,25HROTOR INCIDENCE/DEVIATION,25,7.,90.,0.,5.)
      FPN=NSPEED
      CALL NUMBER(3.0,8.25,.25,FPN,0.,-1)
      CALL SYMBOL(1.0,6.5,.105,0,0.,-1)
      CALL SYMBOL(1.30,6.45,.125,3HHUB,0.,3)
      CALL SYMBOL(1.0,6.1,.105,1,0.,-1)
      CALL SYMBOL(1.30,6.05,.125,3HMID,0.,3)
      CALL SYMBOL(1.0,5.7,.105,2,0.,-1)
      CALL SYMBOL(1.30,5.65,.125,3HTIP,0.,3)
      DO 110 J=1,3
      XX2(7,J)=0.0
      XX2(8,J)=0.2
      DEVSGN(7,J)=0.0
      DEVSGN(8,J)=5.0
      L=J-1
  110 CALL LINE(XX2(1,J),DEVSGN(1,J),6,1,1,L)
      CALL PLOT(8.,0.,-3)
```

```
150 CONTINUE
    IF(M.EQ.NCASE)GO TO 170
    M=M+1
    GO TO 30
170 CONTINUE
    CALL PLOTE
    END
```

SECTION C2. STAPLOT PROGRAM

a. STAPLOT INPUT DATA FORMAT

In the following chart, one line corresponds to one card. Values in parentheses indicate the input format for the corresponding variable.

```
NCASE   (I6)      NPLOT (I6)
                                                         ┐
NTITLE  (I12)                                            │
                                                         │
NPSPTS  (I6)                                             │
                                         } Occurs        │
PDIST  (F10.0)    PSP   (F10.0)          } NPSPTS        │
                                         } Times         │
                                                         │
PDIST  (NPPT)   (F10.0)   PSP (NPPT)   (F10.0)           │  Occurs
                                                         ├─ NCASE
PDIST  (NPPTS) (F10.0)   PSP (NPPTS) (F10.0)             │  Times
                                                         │
NSSPTS  (I6)                                             │
                                     } Occurs            │
SDIST  (F10.0)  SSP (F10.0)          } NSSPTS            │
                                     } Times             │
                                                         │
SDIST (NPPT)   (F10.0)   SSP (NPPT)   (F10.0)            │
                                                         │
SDIST (NPPTS) (F10.0)   SSP (NPPTS)  (F10.0)             ┘
```

I. DEFINITION OF INPUT DATA ITEMS

NCASE	Number of Test Point Cases to be run (Each requires a separate input data set).
NPLOT	Plotting Option. NPLOT = 1, Plots will be made. NPLOT = 0, No plots will be made.
[illegible]	12 Digit Test Point Identification Number for each NCASE.
NPSPTS	Number of Pressure Surface Static Pressure Readings to be Input for each NCASE.
PDIST	Chord Distance from Leading Edge (On chosen radius) of each Pressure Tap on Pressure surface.
PSP	Pressure Surface Static Pressure at each PDIST.
SDIST	Same as PDIST, except for Suction Surface Pressure Taps.
SSP	Suction Surface Static Pressure at each SDIST.
NSSPTS	Same as NPSPTS except for Suction Surface.
NPPT	(NPSPTS + 1) Array Location for Starting Value of Static Pressure Axis (YAXIS).
NPPTS	(NPSPTS + 2) Array Location Pressure/in value for Pressure Axis (YAXIS).
NSPT	(NSSPTS + 1) Same as NPPT.
NSPTS	(NSSPTS + 2) Same as NPPTS.

PDIST(NPPT) Starting Value of Percent Chord axis (X AXIS).

PDIST(NPPTS) Percent Chord/in value for X Axis.

SDIST(NSPT) Same as PDIST(NPPT).

SDIST(NSPTS) Same as PDIST(NPPTS).

PSP(NPPT). Starting Value of Static Pressure Axis.

PSP(NPPTS)	Pressure/in Value for Static Pressure Axis.
SSP(NPPT)	Same as PSP (NPPT)
SSP(NPPTS)	Same as PSP(NPPTS)

c. PROGRAM LISTING

```
      PROGRAM STAPLOT(INPUT,OUTPUT,PLOT)
      DIMENSION PDIST(400),PSP(400),SSP(400),SDIST(400)
      READ 10,NCASE,NPLOT
   10 FORMAT(2I12)
      PRINT 20,NCASE,NPLOT
   20 FORMAT (1H1,10X,31HSTATOR SURFACE STATIC PRESSURES,//, 9X,17HNUMBE
     1R OF CASES =,I3,//,9X, 7HNPLOT =,I3)
      I=1
   30 READ 40,NTITLE
   40 FORMAT (I12)
      PRINT 50,NTITLE
   50 FORMAT (1H1,//,20X,18HTEST POINT NUMBER ,I12)
      READ 60,NPSPTS
   60 FORMAT (I12)
      J=NPSPTS+2
      READ 70,(PDIST(K),PSP(K),K=1,J)
   70 FORMAT (F10.2,F10.3)
      DO 80 L=1,NPSPTS
   80 PDIST(L)=(((PDIST(L)-2.93)/1.795)*100.0)
      PRINT 90,(PDIST(K),PSP(K),K=1,NPSPTS)
   90 FORMAT (///,24X,22HSTATIC PRESSURE (PSIA),//,27X,16HPRESSURE SURFA
     1CE,//,18X,13HPERCENT CHORD,10X,8HPRESSURE,//,(17X,F10.2,11X,F10.3)
     2)
      READ 100,NSSPTS
  100 FORMAT (I12)
      J=NSSPTS+2
      READ 110,(SDIST(K),SSP(K),K=1,J)
  110 FORMAT (2F10.3)
      DO 120 L=1,NSSPTS
  120 SDIST(L)=(((SDIST(L)-2.93)/1.795)*100.0)
      PRINT 130,(SDIST(K),SSP(K),K=1,NSSPTS)
  130 FORMAT(///,28X,15HSUCTION SURFACE,//,18X,13HPERCENT CHORD,10X,8HPR
     1ESSURE,//,(17X,F10.2,11X,F10.3))
      IF(1-NPLOT)150,140,150
  140 CONTINUE
      NPPT=NPSPTS+1
      NPPTS=NPSPTS+2
      NSPT=NSSPTS+1
      NSPTS=NSSPTS+2
      CALL PLOT(0.0,-12.0,-3)
      CALL PLOT(3.0,2.0,-3)
      CALL AXIS(0.,0.,13HPERCENT CHORD,-13,5.,0.,PDIST(NPPT),PDIST(NPPTS
     1))
      CALL AXIS(0.,0.,15HPRESSURE (PSIA),15,5.,90.,PSP(NPPT),PSP(NPPTS))
      CALL LINE(PDIST,PSP,NPSPTS,1,1,0)
      CALL LINE(SDIST,SSP,NSSPTS,1,1,4)
      FPN=NTITLE
      CALL NUMBER(1.8,6.25,.2,FPN,0.,-1)
```

```
      CALL SYMBOL(1.5,5.8,.105,0,0.,-1)
      CALL SYMBOL(1.8,5.74,.125,16HPRESSURE SURFACE,0.,16)
      CALL SYMBOL(1.5,5.48,.105,4,0.,-1)
      CALL SYMBOL(1.8,5.42,.125,15HSUCTION SURFACE,0.,15)
      CALL SYMBOL(1.5,5.16,.105,0,0.,-1)
      CALL SYMBOL(1.5,5.16,.105,4,0.,-1)
      CALL SYMBOL(1.8,5.10,.125,17HCALCULATED VALUES,0.,17)
      CALL SYMBOL(1.8,4.90,.125,24HLEADING & TRAILING EDGES,0.,24)
      CALL PLOT(6.,0.,-3)
  150 CONTINUE
      IF (I-NCASE)160,170,170
  160 I=I+1
      GO TO 30
  170 CONTINUE
      CALL PLOTE
      END
```

APPENDIX D

RAW EXPERIMENTAL DATA

This appendix presents a listing of the experimental data after being dumped from magnetic tape onto computer cards. The first two ten-character "words" of each test contain the test identification number.

TEST I.D. NUMBER 2120 010984C

0000000212	0501553400000CC00056	1+0003466000000000057	0+0005776CC0C000058	0+001632E
0000000059	0+00013E0300000000060	1+000270E000000000061	0+000252ECC0C000062	0+00025EE
0000000063	0+000254E0000C00064	0+000595E000000000065	0+00C969ECC0C000066	0+000970E
0000000067	0+0001431-0000C00068	0+000370E000000000069	0+000925ECC00000070	0+000902E
0000000071	0+000900E0000C00072	0+000921E000000000073	0+000916ECC0C000074	0+000980E
0000000075	0+001013E0000C00076	0+000372E000000000077	0+000950ECC0C000078	0+001036E
0000000079	0+001010E0000C00080	0+000960E000000000081	0+00102EECC0C000082	0+000971E
0000000083	0+000944E0000C00084	0+000930E000000000085	0+00C944ECC0C000086	0+000949E
0000000087	0+000847E0000C00088	0+000937E000000000089	0+000853EC0C0000090	0-001375E
0000000091	0+000956E0000C00092	0+000929E0000000C093	0+000950E0C000000094	0+000911E
0000000095	0+023356E0000C00096	0+000955E000000000097	0+00C955ECC0C000098	0+000993E
0000000099	0F0006343000C000101	0+017062E000000000201	0+01793ECC0C000301	0-007303E
0000000401	0+001171E0000C00103	0+015226E000000000203	0+01734ECC0C000303	0-007313E
0000000403	0+001054E0000C00105	0+017345E0000000P.05	0+01783ECC0C000305	0-009260E
0000000405	0+00093E0000C00107	0+016194E00000003' 7	0+01700ECC0C000307	0-007657E
0000000407	0+001170E0000C00109	0+015845E000000C. 09	0+01597ECC0C000309	0-007452E
0000000409	0+001094E0000C00111	0+015576E000000000211	0+01634ECC0C000311	0-006175E
0000000411	0+001279E0000C00113	0+015935E000000000213	0+01678ECC0C000313	0-006174E
0000000413	0+001025E0000C00115	0+015455E000000000215	0+01673ECC0C000315	0-006142E
0000000415	0+000936E0000C00117	0+015949E000000000217	0+01671ECC0C000317	0-006192E
0000000417	0+001043E0000C00119	0+016374E000000000219	0+01671ECC0C000319	0-006154E
0000000419	0+001072E0000C00121	0+016057E000000000221	0+01775ECC0C000321	0-006197E
0000000421	0+001425E0000C00123	0+016276E000000000223	0+01755ECC0C000323	0-006217E
0000000423	0+001272E0000C00125	0+016750E000000000225	0+01760ECC0C000325	0-006203E
0000000425	0+000373E0000C00127	0+017074E000000000227	0+01755ECC0C000327	0-006205E
0000000427	0+001152E0000C00129	0+017169E000000000229	0+01767ECC0C000329	0-006223E
0000000429	0+001149E0000C00131	0+012415E000000000231	0+01742ECC0C000331	0-006460E
0000000431	0+001447E0000C00133	0+010810E000000000233	0+01733ECC0C000333	0-006543E
0000000433	0+001530E0000C00135	0+011173E000000000235	0+01747E00000000335	0-006664E
0000000435	0+000932E0000C00137	0+012401E000000000237	0+01763ECC0C000337	0-006378E
0000000437	0+001406E0000C00139	0+014239E000000000239	0+01763ECC0C000339	0-006713E
0000000439	0+001212E0000C00141	0+017068E000000000241	0+01790ECC0C000341	0-007302E
0000000441	0+000391E0000C00143	0+017067E000000000243	0+01790ECC0C000343	0-007302E
0000000443	0+000331E0000C00145	0+035678E000000000245	0+03693ECC0C000345	0-000353E
0000000445	0+007392E0000C00147	0+053556E000000000247	0+05315ECC0C000347	0+000293E
0000000447	0+014116E			

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TEST I.D. NUMBER 212050213440

0000000212	0502134400000000056	0+000362E0000000057	0+000968E0000000058	0+001675E
0000000059	0+000010E0000000060	0+000262E0000000061	0+000249E0000000062	0+000251E
0000000063	0+000252E0000000064	0+001029E0000000065	0+001027E0000000066	0+000957E
0000000067	0+000952E0000000068	0+000959E0000000069	0+000955E0000000070	0+000934E
0000000071	0+000935E0000000072	0+000946E0000000073	0+000943E0000000074	0+001026E
0000000075	0+001039E0000000076	0+000977E0000000077	0+001021E0000000078	0+001062E
0000000079	0+001079E0000000080	0+000334E0000000081	0+001044E0000000082	0+000995E
0000000083	0+001016E0000000084	0+000332E0000000085	0+000970E0000000086	0+000976E
0000000087	0+000988E0000000088	0+000968E0000000089	0+000929E0000000090	0-001435E
0000000091	0+000990E0000000092	0+000941E0000000093	0+000967E0000000094	0+000941E
0000000095	0+041837E0000000096	0+001004E0000000097	0+000971E0000000098	0+000991E
0000000099	0F00050330000000101	0+017036E0000000201	0+017969E0000000301	0-007303E
0000000401	0+001452E0000000103	0+016582E0000000203	0+017399E0000000303	0-007303E
0000000403	0+001335E0000000105	0+017053E0000000205	0+017891E0000000305	0-007421E
0000000405	0+001131E0000000107	0+016293E0000000207	0+017101E0000000307	0-007163E
0000000407	0+001505E0000000109	0+015379E0000000209	0+017225E0000000309	0-007043E
0000000409	0+001233E0000000111	0+015934E0000000211	0+017556E0000000311	0-006090E
0000000411	0+001438E0000000113	0+015399E0000000213	0+016686E0000000313	0-006080E
0000000413	0+001370E0000000115	0+016077E0000000215	0+016894E0000000315	0-006885E
0000000415	0+001164E0000000117	0+016334E0000000217	0+016839E0000000317	0-006093E
0000000417	0+001492E0000000119	0+016933E0000000219	0+016637E0000000319	0-006956E
0000000419	0+001299E0000000121	0+016551E0000000221	0+018129E0000000321	0-006103E
0000000421	0+001522E0000000123	0+016679E0000000223	0+017969E0000000323	0-006129E
0000000423	0+001430E0000000125	0+017156E0000000225	0+018593E0000000325	0-006122E
0000000425	0+001214E0000000127	0+017430E0000000227	0+018556E0000000327	0-006110E
0000000427	0+001570E0000000129	0+017532E0000000229	0+018679E0000000329	0-006130E
0000000429	0+001394E0000000131	0+013521E0000000231	0+016486E0000000331	0-006174E
0000000431	0+001535E0000000133	0+012935E0000000233	0+018357E0000000333	0-006184E
0000000433	0+001505E0000000135	0+013593E0000000235	0+018479E0000000335	0-006407E
0000000433	0+001215E0000000137	0+014384E0000000237	0+016632E0000000337	0-006130E
0000000437	0+001524E0000000139	0+015757E0000000239	0+018587E0000000339	0-006443E
0000000439	0+001351E0000000141	0+017071E0000000241	0+017910E0000000341	0-007302E
0000000441	0+000344E0000000143	0+017072E0000000243	0+017909E0000000343	0-007302E
0000000443	0+000393E0000000145	0+035679E0000000245	0+036535E0000000345	0-008363E
0000000445	0+007395E0000000147	0+053562E0000000247	0+055166E0000000347	0+006294E
0000000447	0+014119E			

TEST I.D. NUMBER 212050316040

```
0000000212 0+0031504000000000056 0+0010020000000000057 0+0003876000000000058 0+0016646
0000000059 0+0000309600000000060 0+0002556000000000061 0+0002516000000000062 0+000252E
0000000063 0+0002516900000000064 0+0011006000000000065 0+0010236000000000066 0+001003E
0000000067 0+0010246000000000068 0+0010146000000000069 0+0010056000000000070 0+000980E
0000000071 0+0009036000000000072 0+0011456000000000073 0+0009736000000000074 0+001094E
0000000075 0+0011136000000000076 0+0009936000000000077 0+0010216000000000078 0+001133E
0000000079 0+0011256000000000080 0+0010636000000000081 0+0011056000000000082 0+001027E
0000000083 0+0010386000000000084 0+0009646000000000085 0+0010426000000000086 0+001064E
0000000087 0+0010436000000000088 0+0010356000000000089 0+0009876000000000090 0-002922E
0000000091 0+0010436000000000092 0+0009836000000000093 0+0010166000000000094 0+001002E
0000000095 0+0005256000000000096 0+0010106000000000097 0+0010056000000000098 0+001004E
0000000099 0+0000303300000000101 0+0170696000000000201 0+0179136000000000301 0-007305E
0000000401 0+0015335000000000103 0+0155516000000000203 0+0174886000000000303 0-007305E
0000000403 0+0017116900000000105 0+0170386000000000205 0+0175986000000000305 0-006570E
0000000405 0+0014186000000000107 0+0163916000000000207 0+0172166000000000307 0-006781E
0000000407 0+0017136000000000109 0+0161356000000000209 0+0123916000000000309 0-006702E
0000000409 0+0015720000000000111 0+0161646000000000211 0+0186316000000000311 0-005975E
0000000411 0+0014020000000000113 0+0161956000000000213 0+0170416000000000313 0-005960E
0000000413 0+0017360000000000115 0+0164506000000000215 0+0170386000000000315 0-005959E
0000000415 0+0013540000000000117 0+0167136000000000217 0+0169956000000000317 0-005971E
0000000417 0+0017450000000000119 0+0170646000000000219 0+0170166000000000319 0-005956E
0000000419 0+0015386000000000121 0+0170756000000000221 0+0185336000000000321 0-005972E
0000000421 0+0015356000000000123 0+0172316000000000223 0+0183716000000000323 0-006015E
0000000423 0+0015560000000000125 0+0176206000000000225 0+0194576000000000325 0-005955E
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TEST I.D. NUMBER 212050415940

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TEST I.D. NUMBER 212000F1=240

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TEST I.D. NUMBER 2120506166+40

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T..S1 I... NUMBER 2120504 15.050

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TEST I.D. NUMBER 212050815750

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0000000441	0+0004026000000000143	0+017072E000000000243	0+017516E000000343	0-007307E
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TEST I.D. NUMBER 212050916250

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0000000067	0-0016186030000068	0+0015796E00000069	0+0015596E00000070	0+0014616E
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0000000099	0F001904300000101	0+0170676000000201	0+0179166E00000301	0-0073076E
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0000000441	0+0004045000000143	0+0170736000000243	0+0175196000000343	0-0073076E
0000000443	0+0004046000000145	0+0356896000000245	0+0365906000000345	0-0003656E
0000000445	0+0074386000000147	0+0535806000000247	0+0551926E0000347	0+0062966E
0000000447	0+0141356			

TEST I.D. NUMBER 212051015050

0000000212	0510150500000000056	0+001481E0000000057	0+001456E0000000058	0+001697E
0000000059	0+000010E0000000060	0+000240E0000000061	0+000271E0000000062	0+000272E
0000000063	0+000271E0000000064	0+001591E0000000065	0+001574E0000000066	0+001478E
0000000067	0+001493E0000000068	0+001477E0000000069	0+001472E0000000070	0+001432E
0000000071	0+001441E0000000072	0+001443E0000000073	0+001441E0000000074	0+001565E
0000000075	0+001632E0000000076	0+001422E0000000077	0+001559E0000000078	0+001612E
0000000079	0+001657E0000000080	0+001544E0000000081	0+001617E0000000082	0+001474E
0000000083	0+001557E0000000084	0+001444E0000000085	0+001524E0000000086	0+001534E
0000000087	0+001502E0000000088	0+001435E0000000089	0+001432E0000000090	0+000610E
0000000091	0+001509E0000000092	0+001402E0000000093	0+001457E0000000094	0+001454E
0000000095	0+056540E0000000096	0+001484E0000000097	0+001464E0000000098	0+001481E
0000000099	0F001007330000000101	0+017064E0000000201	0+017916E0000000301	0-007309E
0000000401	0+002046E0000000103	0+016407E0000000203	0+017240E0000000303	0-007309E
0000000403	0+002475E0000000105	0+017047E0000000205	0+017895E0000000305	0-006840E
0000000405	0+001895E0000000107	0+016024E0000000207	0+016844E0000000307	0-006510E
0000000407	0+002455E0000000109	0+015538E0000000209	0+018428E0000000309	0-006395E
0000000409	0+002143E0000000111	0+015643E0000000211	0+018701E0000000311	0-005156E
0000000411	0+001961E0000000113	0+015835E0000000213	0+016548E0000000313	0-005139E
0000000413	0+002561E0000000115	0+016039E0000000215	0+016544E0000000315	0-005157E
0000000415	0+001899E0000000117	0+016532E0000000217	0+016488E0000000317	0-005143E
0000000417	0+002523E0000000119	0+017030E0000000219	0+016493E0000000319	0-005143E
0000000419	0+002243E0000000121	0+017114E0000000221	0+018981E0000000321	0-005143E
0000000421	0+002032E0000000123	0+017372E0000000223	0+018745E0000000323	0-005205E
0000000423	0+002597E0000000125	0+018096E0000000225	0+020340E0000000325	0-005178E
0000000425	0+001354E0000000127	0+018441E0000000227	0+020282E0000000327	0-005190E
0000000427	0+002540E0000000129	0+015459E0000000229	0+020411E0000000329	0-005218E
0000000429	0+002317E0000000131	0+012334E0000000231	0+020212E0000000331	0-005493E
0000000431	0+002219E0000000133	0+012777E0000000233	0+019398E0000000333	0-005213E
0000000433	0+002450E0000000135	0+014552E0000000235	0+020142E0000000335	0-005704E
0000000435	0+001993E0000000137	0+015679E0000000237	0+020361E0000000337	0-005231E
0000000437	0+002412E0000000139	0+017310E0000000239	0+020342E0000000339	0-005683E
0000000439	0+002239E0000000141	0+017071E0000000241	0+017917E0000000341	0-007308E
0000000441	0+000407E0000000143	0+017071E0000000243	0+017917E0000000343	0-007308E
0000000443	0+000406E0000000145	0+035685E0000000245	0+036552E0000000345	0-000364E
0000000445	0+007411E0000000147	0+053530E0000000247	0+055152E0000000347	0+006297E
0000000447	0+0141+06			

TEST I.D. NUMBER 212051114250

0000000212	0511142500000000058	0+001465E0000000057	0+00145EE0000000058	0+001696E
0000000059	0+000011E0000000060	0+000282E0000000061	0+000273E0000000062	0+000273E
0000000063	0+000274E0000000064	0+001554E0000000065	0+001534E0000000066	0+001437E
0000000067	0+001451E0000000068	0+001445E0000000069	0+001438E0000000070	0+001402E
0000000071	0+001409E0000000072	0+001421E0000000073	0+001414E0000000074	0+001513E
0000000075	0+001539E0000000076	0+001400E0000000077	0+001516E0000000078	0+001559E
0000000079	0+001614E0000000080	0+001433E0000000081	0+001570E0000000082	0+001439E
0000000083	0+001490E0000000084	0+001421E0000000085	0+001467E0000000086	0+001477E
0000000087	0+001479E0000000088	0+001426E0000000089	0+001400E0000000090	0+001395E
0000000091	0+001479E0000000092	0+001385E0000000093	0+001429E0000000094	0+001421E
0000000095	0+046449E0000000096	0+001504E0000000097	0+001446E0000000098	0+001479E
0000000099	0F001005300000101	0+017065E0000000201	0+017918E0000000301	0-007309E
0[illegible] 000401	0+001303E0000000103	0+016384E0000000203	0+017215E0000000303	0-007309E
0[illegible]0000403	0+002136E0000000105	0+017048E0000000205	0+017893E0000000305	0-007350E
0000000405	0+001647E0000000107	0+015962E0000000207	0+016779E0000000307	0-006877E
0000000407	0+002332E0000000109	0+015505E0000000209	0+017428E0000000309	0-006718E
0000000409	0+001965E0000000111	0+015947E0000000211	0+017684E0000000311	0-005229[illegible]
0000000411	0+001734E0000000113	0+015385E0000000213	0+016457E0000000313	0-005210E
0000000413	0+002134E0000000115	0+015799E0000000215	0+016467E0000000315	0-005237E
0000000415	0+001602E0000000117	0+016275E0000000217	0+016399E0000000317	0-005232E
0000000417	0+002366E0000000119	0+016997E0000000219	0+016406E0000000319	0-005226E
0000000419	0+0019[illegible]0E0000000121	0+016782E0000000221	0+018730E0000000321	0-005222E
0000000421	0+001880E0000000123	0+017013E0000000223	0+018494E0000000323	0-005284E
0000000423	0+002354E0000000125	0+017804E0000000225	0+019559E0000000325	0-005283E
0000000425	0+001732E0000000127	0+018151E0000000227	0+019497E0000000327	0-005259E
0000000427	0+002448E0000000129	0+018195E0000000229	0+019647E0000000329	0-005263E
0000000429	0+002133E0000000131	0+012004E0000000231	0+019387E0000000331	0-005690E
0000000431	0+002151E0000000133	0+010436E0000000233	0+019199E0000000333	0-005305E
0000000433	0+002375E0000000135	0+012933E0000000235	0+019333E0000000335	0-005949E
0000000435	0+001769E0000000137	0+014369E0000000237	0+019576E0000000337	0-005340E
0000000437	0+002377E0000000139	0+016313E0000000239	0+019550E0000000339	0-005831E
0000000439	0+002222E0000000141	0+017071E0000000241	0+017919E0000000341	0-007308E
0000000441	0+000433E0000000143	0+017071E0000000243	0+017919E0000000343	0-007308E
0000000443	0+000437E0000000145	0+035690E0000000245	0+036555E0000000345	0-000365E
0000000445	0+007412E0000000147	0+053586E0000000247	0+055201E0000000347	0+006297E
0000000447	0+014143E			

TEST I.C. NUMBER 212051212230

0000000212	051212250000000056	0+001496E000000057	0+001489E000000058	0+001704E
0000000059	0+000011E000000060	0+000287E000000061	0+000278E000000062	0+000278E
0000000063	0+000279E000000064	0+001537E000000065	0+001511E000000066	0+001419E
0000000067	0+001427E000000068	0+001433E000000069	0+001411E000000070	0+001384E
0000000071	0+001359E000000072	0+001415E000000073	0+001400E000000074	0+001471E
0000000075	0+001547E000000076	0+001357E000000077	0+001502E000000078	0+001552E
0000000079	0+001621E000000080	0+001494E000000081	0+001566E000000082	0+001426E
0000000083	0+001432E000000084	0+001354E000000085	0+001464E000000086	0+001472E
0000000087	0+001405E000000088	0+001443E000000089	0+001371E000000090	0+003173E
0000000091	0+001455E000000092	0+001362E000000093	0+001431E000000094	0+001414E
0000000095	0+041503E000000096	0+001502E000000097	0+001450E000000098	0+001485E
0000000099	0F0610095300000101	0+017033E000000201	0+017914E000000301	0-007310E
0000000401	0+001381E000000103	0+016341E000000203	0+017189E000000303	0-007310E
0000000403	0+001622E000000105	0+017043E000000205	0+017533E000000305	0-008265E
000000040[illegible]	0+001175E000000107	0+015922E000000207	0+016746E000000307	0-007469E
000000040[illegible]	0+001853E000000109	0+015453E000000209	0+015334E000000309	0-007229E
000000040[illegible]	0+001510E000000111	0+015434E000000211	0+016059E000000311	0-005269E
0000000411	0+001321E000000113	0+015523E000000213	0+016430E000000313	0-005268E
0000000413	0+001922E000000115	0+015565E000000215	0+016428E000000315	0-005273E
0000000415	0+001178E000000117	0+016137E000000217	0+016362E000000317	0-005281E
0000000417	0+001876E000000119	0+016350E000000219	0+016364E000000319	0-005272E
0000000419	0+001523E000000121	0+016349E000000221	0+019547E000000321	0-005287E
0000000421	0+001482E000000123	0+016784E000000223	0+018307E000000323	0-005328E
0000000423	0+002157E000000125	0+017579E000000225	0+018133E000000325	0-005313E
0000000425	0+001254E000000127	0+017973E000000227	0+018001E000000327	0-005304E
0000000427	0+002131E000000129	0+017924E000000229	0+018230E000000329	0-005335E
0000000429	0+001734E000000131	0+011781E000000231	0+017559E000000331	0-006120E
0000000431	0+001670E000000133	0+009982E000000233	0+017676E000000333	0-005633E
0000000433	0+002272E000000135	0+009116E000000235	0+017852E000000335	0-006386E
0000000435	0+001343E000000137	0+011147E000000237	0+018156E000000337	0-005645E
0000000437	0+002135E000000139	0+013591E000000239	0+018120E000000339	0-006084E
0000000439	0+001355E000000141	0+017037E000000241	0+017916E000000341	0-007309E
0000000441	0+000408E000000143	0+017034E000000243	0+017915E000000343	0-007309E
0000000443	0+000408E000000145	0+035687E000000245	0+036552E000000345	0-000365E
0000000445	0+007413E000000147	0+053534E000000247	0+055198E000000347	0+006297E
0000000447	0+014144E			

TEST I... NUM[illegible] 212051-18060

0000000212	0+0141506E000000005E	0+0020556E0000000057	0+0020C06E0000000058	0+0017186E
0000000053	0+0000116E0000000060	0+0002306E0000000061	0+0002786E0000000052	0+0030280E
0000000063	0+0002[illegible]6E0000000064	0+00021[illegible]E0000000065	0+0021536E0000000066	0+0020776E
0000000067	0+0020736E0000000068	0+0020316E0000000069	0+0020596E0000000070	0+0020066E
0000000071	0+0019956E0000000072	0+0020116E0000000073	0+0020096E0000000074	0+0021026E
0000000075	0+0022056E0000000076	0+0019556E0000000077	0+0021346E0000000078	0+0022216E
0000000079	0+0023436E0000000080	0+0021346E0000000081	0+0022876E0000000082	0+0020256E
0000000083	0+0021[illegible]36E0000000084	0+0020216E0000000085	0+0021056E0000000086	0+0021786E
0000000087	0+0021[illegible]6E0000000088	0+0020576E0000000089	0+0019716E0000000090	0+0033596E
0000000091	0+0021[illegible]6E0000000092	0+0019356E0000000093	0+0020576E0000000094	0+0020056E
0000000095	0+0279546E0000000096	0+0021456E0000000097	0+0020396E0000000098	0+0020966E
0000000099	0+0012076E0000000101	0+0170[illegible]6E0000000201	0+0179136E0000000301	0-0073106E
0000000101	0+0025316E0000000103	0+0161796E0000000203	0+0169996E0000000303	0-0073106E
0000000103	0+0034[illegible]6E0000000105	0+0173356E0000000205	0+0176556E0000000305	0-0067156E
0000000105	0+0025226E0000000107	0+0156716E0000000207	0+0134516E0000000307	0-0062056E
0000000107	0+0053[illegible]6E0000000109	0+01[illegible]0456E0000000209	0+0190796E0000000309	0-0060776E
0000000109	0+0025066E0000000111	0+0181346E0000000211	0+0185036E0000000311	0-0040076E
0000000111	0+0023336E0000000113	0+0152376E0000000213	0+0160556E0000000313	0-0039756E
0000000113	0+00[illegible]6E0000000115	0+0160736E0000000215	0+0160536E0000000315	0-0039946E
0000000115	0+0023[illegible]6E0000000117	0+0155226E0000000217	0+0150076E0000000317	0-0039776E
0000000117	0+0023[illegible]6E0000000119	0+0170326E0000000219	0+0159986E0000000319	0-0039356E
0000000119	0+0024[illegible]6E0000000121	0+0174706E0000000221	0+0197596E0000000321	0-0039716E
0000000121	0+0024176E0000000123	0+0173756E0000000223	0+0194716E0000000323	0-0040446E
0000000123	0+0077136E0000000125	0+0183706E0000000225	0+0212256E0000000325	0-0040016E
0000000125	0+0025[illegible]6E0000000127	0+0153176E0000000227	0+0210566E0000000327	0-0040316E
0000000127	0+0034[illegible]76E0000000129	0+0132746E0000000229	0+0213066E0000000329	0-0040716E
0000000129	0+0032436E0000000131	0+0115356E0000000231	0+0210236E0000000331	0-0048[illegible]16E
0000000131	0+0026[illegible]6E0000000133	0+0101406E0000000233	0+0207146E0000000333	0-0041[illegible]76E
0000000133	0+0035[illegible]6E0000000135	0+0135446E0000000235	0+0208956E0000000335	0-0052236E
0000000135	0+0026176E0000000137	0+0153746E0000000237	0+0212416E0000000337	0-0042956E
0000000137	0+0033[illegible]6E0000000139	0+0157076E0000000239	0+0211416E0000000339	0-0048836E
0000000139	0+0053[illegible]6E0000000141	0+0170346E0000000241	0+0179146E0000000341	0-0073136E
0000000141	0+0004116E0000000143	0+0170356E0000000243	0+0179156E0000000343	0-0073106E
0000000143	0+0004136E0000000145	0+0356796E0000000245	0+0369506E0000000345	0-0003656E
0000000145	0+0074176E0000000147	0+0533536E0000000247	0+0552106E0000000347	0+0063026E
0000000147	0+0141516E			

TEST I.D. NUMEER 212051514360

0000000212	0515143600000C0005E	C+0020716000000057	0+002092EC00000058	0+001732E
0000000059	0+000011600000C00060	C+0002986000000061	0+000290E00000000062	0+000289E
0000000063	0+0002906000C00064	C+0022216000000065	0+002198ECC0C000066	0+002074E
0000000067	C+0020716000C00068	0+0020946000000069	0+002055EC00000070	0+002008E
0000000071	0+002000E000C00072	C+0020196000000073	0+002015EC00000074	0+002113E
0000000075	0+002227E000000076	C+001927E000000077	0+002129E00000000078	0+002219E
0000000079	0+002356600000C00080	0+0021536000000081	0+002293E00000000082	0+002034E
0000000083	0+0021646000CC00084	C+001955E000000085	0+002106EC00000086	0+002183E
0000000087	0+0020396000C00088	C+002126E000000089	0+001947E00000000090	0-001200E
0000000091	0+0021636000C00092	C+0019075000000093	0+002112EC00000094	0+002004E
0000000095	0+05696960000C00096	C+0021656000000097	0+002042EC00000098	0+002125E
0000000099	0F0012036300000C00101	C+0170556000000201	0+017908EEC00000301	0-007310E
0000000401	0+00208060000000103	C+0161536000000203	0+016989E00000000303	0-007309E
0000000403	0+0031516000000105	C+0170306000000205	0+017879EC00C000305	C-007148E
0000000405	0+0019246000CC00107	C+0158716000000207	0+016488E00C000307	C-006631E
0000000407	0+00291360000C00109	C+0150746000000209	0+015839E00000000309	0-006540E
0000000409	0+002476E00000000111	C+015144E000000211	0+016305E000C000311	0-004023E
0000000411	0+0019406000C00113	C+0152726000000213	0+016C84ECC0C000313	0-003988E
0000000413	0+003400E0000C00115	C+0160576000000215	0+016084E0C00000315	0-004008E
0000000415	0+001330E000CC00117	C+0165926000000217	0+015995E00000000317	0-003996E
0000000417	0+002953E000CC00119	C+017070E000000219	0+015999E00C000319	0-003949E
0000000419	0+00264460000C00121	C+0174376000000221	0+019755E00CC000321	0-003981E
0000000421	0+002080E000C00123	C+0178216000000223	0+019429E0C00000323	0-004056E
00000C0423	0+003537E000CC00125	C+0188406000000225	0+019973E00000000325	0-004021E
0C00000425	0+0020616000C00127	C+0192476000000227	0+019807EC000000327	0-004041E
0000000427	0+00318360000000129	C+0192116000000229	0+020057E00000000329	0-004080E
0000000429	0+0029426000C00131	C+0115886000000231	0+019756E000C000331	0-005243E
0000000431	0+0023316000C00133	C+0100216000000233	0+019423EC00000333	0-004417E
0000000433	0+003480E0000C00135	C+0117806000000235	0+019624E00C000335	0-005563E
0000000435	0+002150E000C00137	C+013326E000000237	0+019995EC00C000337	0-004606E
0C00000437	0+003189E000C00139	C+0146906000000239	0+019916EC0C000339	C-005180E
0000000439	0+003040600000C00141	C+017060E000000241	0+017909E00000000341	0-007308E
0C00000441	0+0004126000000143	C+0170606000000243	0+017910ECC0C000343	0-007309E
0C00000443	0+00041160000CC00145	C+0356756000000245	0+036944ECC0C000345	C-000365E
0000000445	0+0074176000CC00147	C+0535826000000247	0+055202E00000000347	0+006302E
0000000447	0+0141526			

TEST I.C. NUMBER 2120516129-0

0000003212	0516123E000000000036	C+0020556000000000057	0+0020626000000000058	0+0017326
0000000059	0+0C0012E000000000060	C+0002976000000000061	0+0002886000000000062	0+0002886
0000000063	0+0002916000000000064	C+0022186000000000065	0+0021906000000000066	0+0020706
0000000067	0+0020896000000000068	C+0020906000000000069	0+0020516000000000070	0+0020096
0000000071	0+0019376000000000072	C+0020166000000000073	0+0020166000000000074	C+0020346
0000000075	0+0022346000000000076	C+0015706000000000077	0+0021366000000000078	C+0022466
0000000079	0+0023546000000000080	C+0021636000000000081	0+0022926000000000082	0+0020316
0000000083	0+0022116000000000084	C+0014626000000000085	0+0021276000000000086	0+0021776
0000000087	0+0019526000000000088	C+0021606000000000089	0+0018806000000000090	C+0025556
0000000091	0+0021976000000000092	C+0018356000000000093	0+0021286000000000094	0+0019616
0000000095	0+0051356000000000096	C+0021336000000000097	0+0020266000000000098	0+0021166
0000000099	0F00120630000000101	C+0170546000000000201	0+0179056000000000301	0-0073096
0000000401	0+0014356000000000103	C+0161556000000000203	0+0169896000000000303	0-0073096
0000000403	0+0032426000000000105	C+0170276000000000205	0+0178766000000000305	0-0079156
0000000405	0+0013596000000000107	C+0156736000000000207	0+0164476000000000307	0-0070716
0000000407	0+0025746000000000109	C+0150726000000000209	0+0135756000000000309	0-0069566
0000000409	0+0021706000000000111	C+0151396000000000211	0+0139346000000000311	0-0040226
0000000411	0+0014036000000000113	C+0152566000000000213	0+0160906000000000313	0-0039686
0000000413	0+0034106000000000115	C+0160536000000000215	0+0160746000000000315	0-0040116
0000000415	0+0012726000000000117	C+0165756000000000217	0+0155986000000000317	0-0039986
0000000417	0+0025166000000000119	C+0170666000000000219	0+0159936000000000319	0-0039336
0000000419	0+0022076000000000121	C+0174306000000000221	0+0197566000000000321	0-0039426
0000000421	0+0010366000000000123	C+0175376000000000223	0+0194096000000000323	0-0040636
0000000423	0+0034426000000000125	C+0183326000000000225	0+0183306000000000325	0-0040226
0000000425	0+0013126000000000127	C+0122356000000000227	0+0181526000000000327	0-0040446
0000000427	0+0029396000000000129	C+0192056000000000229	0+0195006000000000329	C-0040616
0000000429	0+0023516000000000131	C+0115656000000000231	0+0181856000000000331	0-0057426
0000000431	0+0020226000000000133	C+0099796000000000233	0+0177366000000000333	C-0044336
0000000433	0+0032356000000000135	C+0093356000000000235	0+0179786000000000335	0-0060496
0000000435	0+ 0140860000000137	C+0112506000000000237	0+0184076000000000337	0-0049216
0000000437	0+0029516000000000139	C+0124476000000000239	0+0183856000000000339	C-0054836
0000000439	0+0024276000000000141	C+0170566000000000241	0+0179056000000000341	0-0073086
0000000441	0+0004126000000000143	0+0170566000000000243	0+0179056000000000343	0-0073086
0000000443	0+0004126000000000145	C+0356726000000000245	0+0369386000000000345	C-0003656
0000000445	0+0074176000000000147	C+0535806000000000247	0+0551956000000000347	0+0063026
0000000447	0+0141516			

TEST I.C. NUMBER 2120F171556O

0000003212	05171556000000C00058	C+002098600000000057	0+00204760C0C000058	0+0017116
0C00000059	0+0C0013600CCC00CE0	C+002316000000000061	0+002284FC00000062	0+0002836
0C00000063	0+00023560006CC00064	C+002269500000000065	0+002251600000000066	0+0021386
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0000000073	0+002359600000000080	C+002201600000000081	0+002308600C000082	0+0020806
0000000083	0+002218600CC00084	C+C020506000000C0085	0+002151600000000086	0+0022176
0C00000087	0+002147600000C00C88	C+002154600000000089	0+001997600000000090	C+0011516
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LIST I... NUMBER 2120:191:?00

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0000000063	0+0012?3E000000005?	C+002377E0000000000?	0+000234E00000000050	0+0022416
0000000067	0+0022335000000000?9	C+00215100000000006?	0+00215?E000000000070	C+002110E
0000000071	0+002937?00000000072	C+002045E000000000073	0+00203?6E0000000074	C+0023+6E
0000000073	0+0023256E000000007?	C+0023+6E000000000077	0+00222?E00000000078	0+0023?4E
000000007?	0+002+?0E000000000?0	C+0023360000000000?1	0+00237?E000000000082	0+0021?1E
0000000083	0+0023??E0000000084	C+002170E000000000085	0+00219??E00000000085	0+002285E
0000000087	0+00225?E00000000??	C+0022+6E000000000088	0+002079E00000000090	C-000752E
0000000091	0+0022?28000000000?2	C+00207?E000000000093	0+00215+6E0000000094	0+002072E
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0000000+01	0+0024?C000000000103	C+01?2?3E?000000000203	0+01705?E00000000303	C-007312E
0000000+03	0+0003726000000000105	C+0170226000000000205	0+01?87?E00000000305	0-0058+?E
0000000+05	0+00??5?000000000107	C+01?7?E0000000000207	0+01?61+E00000000307	0-00?5C3E
0000000+07	0+0033?7E000000000109	C+01?2?3E0000000000209	0+02022?3E000000000309	0-0053?3E
0000000+0?	0+00??5?E000000000111	C+01?37+E0000000000211	0+020??7?E00000000311	C-00386?E
0000000-11	0+002?3?000000000113	C+01?+9?E0000000000213	0+01?2?9E00000000313	C-00393?E
0000000-13	0+00?5?72?0000000011?	C+01?135E0?000000021?	0+01?2?E000000000031?	0-0033?2E
0000000-1?	0+002??5000000000117	C+0173?2?0000000000217	0+01?1?1?E000000000317	0-003781E
0000000-17	0+003??+?00000000119	C+0171?0E0000000000219	0+01?1?1E00000000319	0-003730E
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0000000-21	0+002?+??00000000123	C+01?7??0000000000223	0+019?43E00000000323	0-00?332E
0000000+23	0+00??22?00000000125	C+01?2?1E000000000225	0+02?0?EE00000000032?	0-003808E
0000000-2?	0+00?0-3?00000000127	C+01?7?5?E000000000227	0+022?24E00000000327	C-0033?3E
0000000-27	0+00??21?00000000129	C+01?7?1?0000000000229	0+0231?E000000000329	0-00393?E
0000000-2?	0+00??3E00000000131	C+0131?3?E0000000000231	0+0229C6E00000000331	0-0044?3E
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0000000-3?	0+0031?1E00000000137	C+01?4136000000000237	0+0230EE?000000000337	0-0040+?E
0000000-37	0+00?37E000000000139	C+01?4?3?E0000000000239	0+023C29E00000000339	0-0043?+E
0000000-3?	0+003?+?6E00000000141	C+0173+9E0000000000241	0+017?9?E0000000003+1	0-007307E
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0000000-+3	0+000+1?E00000000145	C+0035?0E0000000000245	0+03?929?E000000003+5	0-000303E
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0000000+-7	0+01-1?3?			

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TEST I.D. NUMBER 212051916350

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0000000067 0+002293E0000000068 0+002234E0000000069 0+002219E0000000070 0+002107E
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0000000099 0F00120830000000101 0+017033E0000000201 0+017682E0000000301 0-007313E
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TEST I.D. NUMBER 212070215070

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0000000071	0+002123E000000000072	0+002173E000000000073	0+002172E000000000074	0+002332E
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0000000079	0+002696E000000000080	0+002375E000000000081	0+002577E000000000082	0+002211E
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0000000403	0+004672E000000000105	0+017272E000000000205	0+018116F000000000305	0-006101E
0000000405	0+002655E000000000107	0+015616E000000000207	0+018432E000000000307	0-005692E
0000000407	0+004370E000000000109	0+014786E000000000209	0+016520E000000000309	0-005725E
0000000409	0+003579E000000000111	0+015062E000000000211	0+016917E000000000311	0-002408E
0000000411	0+002770E000000000113	0+015223E000000000213	0+015886E000000000313	0-002439E
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0000000417	0+004353E000000000119	0+017453E000000000219	0+015811E000000000319	0-002220E
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0000000427	0+004463E000000000129	0+021014E000000000229	0+022518E000000000329	0-002275E
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0000000439	0+004119E000000000141	0+017305E000000000241	0+018153E000000000341	0-007297E
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TEST I.D. NUMBER 21207031-770

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0000000063	0-077341E0000000064	C+002558E0000000065	0+002490E0000000066	0+002304E
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0000000071	0+002152E0000000072	C+002207E0000000073	0+0022C1E0000000074	0+002316E
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0000000091	0+002431E0000000092	C+002031E0000000093	0+0024C8E0000000094	0+002181E
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0000000401	0+002635E0000000103	C+016175E0000000203	0+016991E0000000303	0-007297E
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0000000405	0+002431E0000000107	C+015317E0000000207	0+016412E0000000307	0-005881E
0000000407	0+004231E0000000109	C+014735E0000000209	0+015561E0000000309	0-005921E
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0000000415	0+002235E0000000117	C+017710E0000000217	0+015809E0000000317	0-002311E
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0000000419	0+003427E0000000121	C+018817E0000000221	0+021555E0000000321	C-002314E
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0000000423	0+004747E0000000125	C+020575E0000000225	0+021601E0000000325	0-002335E
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0000000431	0+003141E0000000133	C+010272E0000000233	0+020826E0000000333	0-002892E
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0000000447	0+0140026			

TEST I.D. NUMBER 2120701070

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0000000071	0+0021550000000000072	0+0022136E00000000073	0+0022C8E00000000074	0+0023566E
0000000075	0+002-17E00000000076	0+0021406E00000000077	0+0023588E00000000078	0+0025-46
0000000079	0+0027196000000000080	0+0024376E00000000081	0+002608E00000000082	0+0022406
0000000083	0+0024730000000000084	0+002154E00000000085	0+002343E00000000086	0+002456E
0000000087	0+0022596E00000000088	0+0024326E00000000089	0+002143E00000000090	0-000176E
0000000091	0+0062-3305000000092	0+002136E00000000093	0+002413E00000000094	0+002156E
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0000000099	0F0013143000000000101	0+0172354E00000000201	0+015141E00000000301	0-0072966E
00000000-01	0+002354-3000000000103	0+0161134E00000000203	0+016973E00000000303	0-0072966
00000000-03	0+00463560000000105	0+0172726000000000205	0+01811GE00000000305	0-0061026
0000000465	0+002527E0000000107	0+0153086E00000000207	0+019417E00000000307	0-005695E
00000000-07	0+00+34450000000109	0+014731E00000000209	0+016552E00000000309	0-005724E
00000000-03	0+0035+7E00000000111	0+0150316E00000000211	0+016559E00000000311	0-002426E
00000000+11	0+002774E00000000113	0+015224E00000000213	0+0158E5E00000000313	0-0024+6E
00000000-13	0+00+770E00000000115	0+015E95E00000000215	0+015880E00000000315	0-002341E
00000000+15	0+0025550000000000117	0+0177396E00000000217	0+015608E00000000317	0-002308E
00000000-17	0+00-315E00000000119	0+0174506E00000000219	0+015815E00000000319	0-002235E
00000000+19	0+0035256000000000121	0+015597E00000000221	0+021539E00000000321	0-002312E
00000000421	0+0025596000000000123	0+0154746E00000000223	0+021121E00000000323	0-0323756
00000000-23	0+00-55530000000125	0+0205756E00000000225	0+022372E00000000325	0-002333E
00000000+25	0+002628E00000000127	0+0212-96E00000000227	0+022140E00000000327	0-002307E
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00000000+31	0+0031316000000000133	0+0102856000000000233	0+021631E00000000333	0-002834E
00000000+33	0+00+531E00000000135	0+014335E00000000235	0+021533E00000000335	0-0045+3E
00000000+35	0+0028.7500000000137	0+014359E00000000237	0+022420E00000000337	0-002930E
00000000+37	0+00443060000000139	0+015+336000000000239	0+022401E00000000339	0-004022E
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00000000443	0+0002326000000000145	0+035992E00000000245	0+037166E00000000345	0-000357E
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TEST I.D. NUMBER 21207071570

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0000000067 0+0023036000000000068 C+0023116000000000069 0+002259E000000000070 0+002171E
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0000000075 0+0024326000000000076 C+0021756000000000077 0+002370E000000000078 0+002532E
0000000079 0+0025656000000000080 C+0023396000000000081 0+002E01E000000000082 0+002262E
0000000083 0+0024346000000000084 C+0022666000000000085 0+002334E000000000086 0+002487E
0000000087 0+0023566000000000088 C+0023636000000000089 0+002177E000000000090 C-001031E
0000000091 0+0024456000000000092 C+0021346000000000093 0+002353E000000000094 0+002157E
0000000095 0+0057436000000000096 0+0023366000000000097 0+002241E000000000098 0+002309E
0000000099 0F0013533000000000101 C+0172936000000000201 0+018142E000000000301 0-007296E
0000000401 0+0035516000000000103 C+0162006000000000203 0+017005E000000000303 0-007296E
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0000000405 0+0033676000000000107 C+0156256000000000207 0+016421E000000000307 C-005066E
0000000407 0+0047586000000000109 C+0148376000000000208 0+019678E000000000309 0-005025E
0000000409 0+0040836000000000111 0+0150796000000000211 0+020175E000000000311 0-002405E
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0000000439 0+0045706000000000141 C+0173156000000000241 0+018155E000000000341 0-007291E
0000000441 0+0002926000000000143 C+0173056000000000243 0+019155E000000000343 0-007291E
0000000443 0+0002926000000000145 0+0353936000000000245 0+037157E000000000345 0-000355E
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0000000447 0+0140016
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TEST 1.1. TIMELF 212070=15970

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0000000063 0-00173+E000C000064  0+00253360000000065  0+002503E0000000066  0+0023+2E
0000000067 0+00233FE000000065  0+002324E000C000068  0+00227ZECCCC000070  0+00216+E
0000000071 0+00210-F000000072  0+00221EE000000073  0+00220EC0000000074  0+0025Z3E
0000000073 0+002503600000C0076  0+00220960000000077  0+002395E000000076  0+002539E
0000000074 0+0026:3E000000080  0+0024006000000061  0+0026116C000000062  0+0022S7E
0000000085 0+002-+35000000084  0+00232E6000000038.  0+0023+3FCCC0000036  0+00250+E
0000000057 0+002+59E000000088  0+002336E000000008S  0+002221ECCC000090  0+00270SE
0000000091 0+0024:5F0000000S2  0+0021S75000000093  0+002357ECCC000034  0+002203E
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0000000411 0+005576E000C000113  0+015277E000000213  0+015938E000000313  0-002432E
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0000000435 0+003?30E000C000137  0+015307E000000237  0+025112E0000000337  0-002575E
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0000000443 0+0002325300003145  0+03390+E000000245  0+037128ECCC000345  0-000356E
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0000000447 0+014002E
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TEST I.D. NUMBER 212070916170

0000000212	0709161700000000056	0+002352E0000000057	0+002344E0000000058	0+000965E
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0000000063	0-078817E0000000064	0+002670E0000000065	0+002610E0000000066	0+002447E
0000000067	0+002420E0000000068	0+002412E0000000069	0+002370E0000000070	0+002273E
0000000071	0+002245E0000000072	0+002289E0000000073	0+002282E0000000074	0+002626E
0000000075	0+002577E0000000076	0+002302E0000000077	0+002493E0000000078	0+002602E
0000000079	0+002740E0000000080	0+002479E0000000081	0+002888E0000000082	0+002402E
0000000083	0+002523E0000000084	0+002452E0000000085	0+002419E0000000086	0+002586E
0000000087	0+002559E0000000088	0+002485E0000000089	0+002349E0000000090	0+002223E
0000000091	0+002549E0000000092	0+002227E0000000093	0+002439E0000000094	0+002277E
0000000095	0+041609E0000000096	0+002492E0000000097	0+002300E0000000096	0+002376E
0000000099	0F00138230000000101	0+017299E0000000201	0+019148E0000000301	0-007298E
0000000401	0+003839E0000000103	0+016278E0000000203	0+017100E0000000303	0-007297E
0000000403	0+006525E0000000105	0+017294E0000000205	0+018127E0000000305	0-004760E
0000000405	0+003564E0000000107	0+015733E0000000207	0+016542E0000000307	0-004441E
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0000000425	0+004076E0000000127	0+021539E0000000227	0+025817E0000000327	0-002187E
0000000427	0+004558E0000000129	0+021537E0000000229	0+026061E0000000329	0-002155E
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0000000441	0+000291E0000000143	0+017313E0000000243	0+018150E0000000343	0-007292E
0000000443	0+000231E0000000145	0+035916E0000000245	0+037178E0000000345	0-000356E
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TEST I.D. NUMBER 21207101508C

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0000000063 0-0830056000000C00064 C+0035036000000000065 0+003427EC00000066 0+003166E
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0000000099 0F00157730000C00101 C+C172976000000000201 0+018145E000000000301 C-007297E
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0000000445 0+007290E00000C00147 C+053737600000000247 0+055398ECC0C0C0347 C+006298E
0000000447 0+014009E
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TEST I.D. NUMBER 212071315080

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0000000067	0+003109600000000068	0+0030396000000000069	0+0030636000000000070	0+0029516
0000000071	0+002920630000000072	0+0029586000000000073	0+0029206000000000074	0+003150E
0000000075	0+003359600000000076	0+0029216000000000077	0+0032126000000000078	0+003536E
0000000079	0+003700600000000080	0+0032166000000000081	0+0035006000000000082	0+003075E
0000000083	0+003471600000000084	0+0028756000000000085	0+0031806000000000086	0+003287E
0000000087	0+002993600000000088	0+0033636000000000089	0+0028486000000000090	0+000467E
0000000091	0+003273600000000092	0+002820F000000000093	0+0033076000000000094	0+002944E
0000000095	0+044303600000000096	0+0031886000000000097	0+0030316000000000098	0+003199E
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0000000405	0+003034600000000107	0+0152246000000000207	0+0160606000000000307	0-004977E
0000000407	0+006121603000000109	0+0141436000000000209	0+0155536000000000309	0-005097E
0000000409	0+004036600000000111	0+0144356000000000211	0+0160866000000000311	0-000819E
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0000000443	0+000242600000000145	0+0359126000000000245	0+0371796000000000345	0-000356E
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0000000447	0+014013E			

TEST I... NUMBER 2320714133J

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0C00000087	J+0031110000000088	C+003319E000000089	0+002907EC00000090	0+0048+7E
0000000091	0+0033EE0000000092	C+00284E000000093	0+00328EEC00000094	0+00298E
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0000000099	0F0015733000000101	C+017237E0000000201	0+0181+EEC00000301	0-007293E
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3000000-03	0+60+2726000000105	C+0172.7E000000205	0+C1A117EC00000305	C-00+9+3E
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0C00000-07	0+00513500000000109	0+01+174E000000209	0+01525EC00000309	0-00+681E
0C00000+09	0+00+7576000000111	C+01+936E000000211	0+016597EC00000311	0-000822E
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0C00000-15	0+0057030000000117	C+017830E000000217	0+015291EC00000317	0-000628E
0C00000+17	0+0055560000000119	C+017528E000000219	0+015314EC00000319	0-0003+2E
0C00000-19	0+00+7626000000121	C+018875E000000221	0+025C0EC00000321	0-000425E
0C00000-21	0+00+03C0000000123	C+020828E000000223	0+022531EC00000323	0-0003+2E
0C00000-25	J+0052716000000125	C+022231E000000225	0+025138EC00000325	C-00036JE
0C00000-25	0+0037130000000127	C+022375F000000227	0+024930EC00000327	0-0002.2E
0C00000-27	0+0053020000000129	C+0224+39E000000229	0+023434EC00000329	0-000177E
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0C00000+41	J+002133E000000143	0+017309E000000243	0+016157EC000003+3	C-00729+E
0C00000++3	0+000232E000000145	C+035912E000000245	0+037174EC000003+5	0-000357E
0000000+45	0+0072596000000147	C+053791E000000247	0+065401EC00000347	J+000629E
0C00000++7	0+014012E			

TEST I.D. NUMBER 2120715159.0

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0000000063 0-003379E0000000064 C+003617E000000065 0+003493EC00000066 0+003215E
0000000067 0+003142E0000000068 C+003131E000000069 0+003096E000000070 0+002975E
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0000000087 0+003274E000000088 C+003315E000000089 0+002994EC00000090 0-000111E
0000000091 0+003353E000000092 C+002919E000000093 0+003292EC00000094 C+003299E
0000000095 0+005170E000000096 C+003239E000000097 0+003041EC00000098 C+003220E
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0000000405 0+006430E000000107 C+015293E000000207 0+016102E000000307 0-004066E
0000000407 0+002316E000000109 C+014121E000000209 0+021094EC00000309 0-004080E
0000000409 0+005411E000000111 C+014542E000000211 0+021323EC00000311 C-000820E
0000000411 0+004696E000000113 C+014526E000000213 0+015419EC00000313 0-000836E
0000000413 0+005548E000000115 C+015036E000000215 0+015410EC00000315 0-000613E
0000000415 0+004377E000000117 C+017872E000000217 0+015324EC00000317 0-000611E
0000000417 0+005646E000000119 C+017535E000000219 0+015354EC00000319 0-000342E
0000000419 0+005536E000000121 C+019335E000000221 0+023086EC00000321 0-000412E
0000000421 0+004513E000000123 C+020838E000000223 0+022532E000000323 0-000332E
0000000423 0+002433E000000125 0+022394E000000225 0+026944EC00000325 0-000322E
0000000425 0+004573E000000127 C+022843E000000227 0+026799EC00000327 0-000264E
0000000427 0+007956E000000129 C+022474E000000229 0+027179E000000329 0-000156E
0000000429 0+005732E000000131 0+010688E000000231 0+026773EC00000331 C-002337E
0000000431 0+004710E000000133 C+015911E000000233 0+026023EC00000333 0-000670E
0000000433 0+005106E000000135 C+013477E000000235 0+026552E000000335 0-002841E
0000000435 0+004343E000000137 C+015909E000000237 0+028940EC00000337 0-000929E
0000000437 0+005757E000000139 C+013743E000000239 0+027034E000000339 0-002188E
0000000439 0+001306E000000141 C+017313E000000241 0+018160EC00000341 0-007294E
0000000441 0+000233E000000143 C+017313E000000243 0+018160EC00000343 0-007294E
0000000443 0+000293E000000145 C+035310E000000245 0+037174EC00000345 0-000358E
0000000445 0+007293E000000147 C+053739E000000247 0+055401EC00000347 0+006238E
0000000447 0+014011E
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T.ST I.T. NUMBER 3011E0150S5

0000000001	1.0615J5591000000057	0+00+0476000000000059	0+0018546000000000059	0+000009E
0000000063	0+005520600000000061	0+000070E000000000062	0+000E85+6000000063	0+000666E
0000000065	0+[illegible]00000000065	0+0050556000000000066	0+00473E6000000000067	0+004619E
0000000069	0+00+0527E00000000069	0+00+0526000000000070	0+004429E000000000071	0+00+383E
0000000072	0+00++150900000000073	0+00+0570E000000000074	0+004972600000000075	0+004804E
0000000076	0+00+55500000000077	0+00+7066000000000078	0+0051056000000000079	0+005273E
0000000080	0+00+712E000000000081	0+0050+7000000000082	0+00+527E000000000083	0+005035E
0000000084	0+00+5+00000000085	0+00+705000000000086	0+00+603E000000000087	0+00+505E
0000000088	0+00+556E000000000089	0+00+2556000000000090	0+00+595E000000000091	0+004781E
0000000092	0+00+2+10000000000093	0+00+037E000000000094	0+00+330E000000000095	0+0+2247E
0000000096	0+00+2069000000000097	0+00+477E000000000099	0+00+655E000000000099	0F0017373
0000000101	0+01+0+0000000000101	0+010019E0000000000301	0-007270000000000+01	0+003603E
0000000103	0+0155+36000000000103	0+01+4736000000000303	0-007270600000000+03	0+003657E
0000000105	0+0170J4E0000000000105	0+015973000000000305	0-007E02E000000000+05	0+00287SE
0000000107	0+01+51E00000000000107	0+0137306000000000307	0-004568600000000+07	0+006795E
0000000109	0+010+1E000000000109	0+0133946000000000309	0-004733E000000000+09	0+003983E
0000000111	0+013315E000000000111	0+013547E0000000000311	0-000002E0000000000+11	0+003433E
0000000113	0+01+0 9E00000000213	0+013022E000000000313	0-000111E0000000000+13	0+0027 4E
0000000115	0+01+510000000000215	0+012033E000000000315	0+001386E000000000+15	0+00205E
0000000117	0+01.221 0000000217	0+012033E000000000317	0+00016E000000000+17	0+003636E
0000000119	0+017336000000000219	0+012225E000000000319	0+007481E000000000419	0+0038+2E
0000000121	0+013+0E000000000221	0+0214330000000000321	0+000346000000000+21	0+0038+4E
0000000123	0+02110E000000000223	0+021512E000000000323	0+000031E000000000423	0+00951E
0000000125	0+0225+0000000000225	0+0212+1E000000000325	0+00012E000000000+25	0+00203E
0000000127	0+02327E000000000227	0+020397E000000000327	0+006671E000000000427	0+00+311E
0000000129	0+02272+E000000000229	0+021620000000000329	0+0052000000000429	0+00330+E
0000000131	0+0131 5E0000000000231	0+02132E0000000000331	0-002+376000000000431	0+00+533E
0000000133	0+10 +0000000000233	0+0123 +60000000000333	0-000+20E000000000433	0+00EE1+E
0000000135	0+0121234000000000235	0+0200570000000000335	0-003543E6000000000+35	0+002903E
0000000137	0+0135 +E000000000237	0+02150550000000000337	0-000074E000000000437	0+00+306E
0000000139	0+01+374.0000000000239	0+0212150000000000339	0-003350E000000000+39	0+004512E
0000000141	0+0170515000000000241	0+01.019E000000000341	0-007271E000000000441	0+000012E
0000000143	0+01+0500E000000000243	0+01601+6000000000343	0-007271E000000000++3	0+000011E
0000000145	0+003730F000000000245	0+030032E0000000000345	0-000320E0000000000++5	0+0070+2E
0000000147	0+0030570000000000247	0+00339E0000000000347	0+0063+1E000000000++7	0+0137E0E

TEST I.D. NUMBER 301180615385

0000000301	1808153850000C00057	C+0045706000000058	0+001847EC00000059	0+0000106E
0000000060	0+0006676000000C00061	C+00066576000000062	0+000E68E0000000063	0+0006686E
0000000064	0+0051366000000000065	C+0050556000000066	0+004725EC00C000067	0+0046106E
0000000068	0+0045256000000000069	0+0044836000000070	0+004418EC00000071	0+0043766E
0000000072	0+00444460000C00073	C+0043656000000074	0+C04702EC00000075	0+0048876E
0000000076	0+0043456000000077	0+0046416000000078	0+005020EC00000079	0+0052926E
0000000080	0+00472760000000081	0+0050656000000082	0+004516EC00000083	0+0049666E
0000000084	0+0043636000C00085	C+0046796000000086	0+004808EC00000087	0+0045266E
0000000088	0+0043646000000089	C+0042356000000090	0+004599EC00000091	0+0047856E
0000000092	0+0042586000C00093	C+0048166000000094	0+0043976000000095	0+0219956
0000000096	0+0046496000000097	0+0044826000000098	0+004704E000000099	0F0017363
0000000101	0+0170496000000201	C+0160166000000301	0-007272E000000401	0+0040546E
0000000103	0+0155606000000203	C+0145046000000303	0-007272E000000403	0+0066216
0000000105	0+0170016000000205	C+0159686000000305	0-005147E000000405	0+0034716E
0000000107	0+0143336000C00207	C+0137836000000307	0-004425E0C00000407	0+0065616
0000000109	0+0155316000000209	C+0143056000000309	0-004540E000000409	0+0044326E
0000000111	0+0133156000000211	C+0152106000000311	0-000016E000000411	0+0038346E
0000000113	0+0140676000C00213	0+0133276000000313	0-000120EC00000413	0+0060886E
0000000115	0+0143496000C00215	C+0130066000000315	0+00016EEC00000415	0+0031916E
0000000117	0+0172486000C00217	0+0129076000000317	0+000174E000C000417	0+0062946E
0000000119	0+0173816000C00219	C+0129176000000319	0+000472E000000419	0+0043296E
0000000121	0+0198376000C00221	0+0218246000000321	0+000347E000000421	0+0040906E
0000000123	0+0210356000C00223	0+0208046000000323	0+000631E000000423	0+0062726E
0000000125	0+0226096000C00225	C+0227666000000325	0+000620E000000425	0+0032866E
0000000127	0+0232786000000227	C+0224736000000327	0+000E65EC00000427	0+0064066E
0000000129	0+0227156000C00229	C+0231076000000329	0+000757E000000429	0+0045836E
0000000131	0+0101776000000231	C+0226096000000331	0-002280E0000000431	0+0047056E
0000000133	0+0099246000000233	0+0215096000000333	0-000354EC00000433	0+0068476E
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0000000137	0+0148866000C00237	0+0229276000000337	0-000313E000000437	0+0065206E
0000000139	0+0156316000000239	C+0227896000000339	0-002813EC00000439	0+0052976E
0000000141	0+0170506000000241	C+0160166000000341	0-007272E000000441	0+000014E
0000000143	0+0170506000000243	C+0160166000000343	0-007272EC00000443	0+0000136
0000000145	0+0357326000C00245	0+0350956000000345	0-000321E000000445	0+0070446E
0000000147	0+0536726000C00247	C+0533766000000347	0+00E342EC00000447	0+0137906E

TEST I... NUMBER 3011c0515585

0000000301	1A09155650002000057	C+00-5015000000005	0+001c47EC00000059	0+0000106E
0000000063	0+0006555c000000001	C+00065560000J00062	0+0006c6E0000000063	0+0006666E
0000000064	0+005211E000C00066	0+005054E000000065	0+0047508EC00000067	0+004E36E
0000000063	0+0045-5E0000000069	0+0450360000000070	0+004-43EC00000071	0+0043596E
0000000072	0+0044e03E0000000073	C+00-3225000000074	0+004773EC00000075	0+004893E
0000000075	0+004-372603000C0077	C+004521E000000075	0+005CC1EC00000073	0+005317E
0000000080	0+004751E000000081	0+005139E000000082	0+00450E6C00000083	0+004933E
0000000084	0+004413E000000085	C+004534E000000086	0+004E58E000000087	0+0045916E
0000000063	0+004571600000000089	C+004351E000000090	0+004E09EC00000091	0+004739E
0000000092	0+0042375000000093	C+00-5375000000094	0+004425E000000095	0+025567E
0000000095	0+00471eE000000097	C+00443360000000098	0+004732E0L0C000099	CF0017403
0000000101	0+0170-8E0000000201	C+01602160000000301	0-007273EC00000401	0+004435E
0000000103	0+01557250000000203	C+0145136000000303	0-007273EC00000403	0+006727E
0000000105	0+01703456000000205	C+013373E000000305	0-0045E9EC00000405	0+003850E
0000000107	0+0145746000000207	C+0137416000000307	0-004245EC00000407	0+0065c3E
0000000109	0+01355200000000209	C+0159336000000309	0-004320EC00000409	0+004834E
0000000111	0+015312600000000211	C+0164256000000311	0-0000C7EC00000411	0+004183E
0000000113	0+0140516000000213	0+013006E000000313	0-00082c000000413	0+006355E
0000000115	0+01431360000000215	C+0129926000000315	0+000218EC00000415	0+003636E
0000000117	0+0172226000000217	C+0120336000000317	0+00021EEC00000417	0+005313E
0000000119	0+0175730000000219	C+0129226000000319	0+00049BEC00000419	0+004856E
0000000121	0+0145116000000221	C+0213506000000321	0+000375EC00000421	0+004250E
0000000123	0+021125000000223	C+0208286000000323	0+000c796C00000423	0+006578E
0000000125	0+02205350000000225	C+0238126000000325	0+000E37EC00000425	0+003756E
0000000127	0+0233376000000227	C+0235576000000327	0+000717EC00000427	0+006271E
0000000129	0+0227426000000229	C+0241726000000329	0+00078E4E000000429	0+005223E
0000000131	0+0101346000000231	0+0236726000000331	0-002123EC00000431	0+004614E
0000000133	0+011553E000000233	C+0226276000000333	0-000239EC00000433	0+007053E
0000000135	0+0156216000000235	C+0252376000000335	0-00028E6000000435	0+004073E
0000000137	0+01517160000000237	0+0239526000000337	0-00029EEC00000437	0+006345E
0000000139	0+0167946000000239	C+0239246000000339	0-002405EC00000439	0+005932E
0000000141	0+0170526300000241	0+0150226000000341	0-007273EC00000441	0+000014E
0000000143	0+0170536000000243	C+L 2160000000343	0-007274EC00000443	0+000015E
0000000145	0+0357366000000245	C+0350596000000345	0-000322E000000445	0+007047E
0000000147	0+0536516000000247	0+0533576000000347	0+00E344E000000447	0+013795E

TEST I.D. NUMBER 301181015885

0000000301	1.0101568590000000057	0+004600E0000000058	0+001848E0000000059	0+0000106
0000000060	0+000646000000000061	0+000652E0000000062	0+000E63E0000000063	0+0006E4E
0000000064	0+005222E0000000065	0+005104E0000000066	0+004756E0000000067	0+004547E
0000000068	0+004530E0000000069	0+004511E0000000070	0+004442E0000000071	0+004399E
0000000072	0+004469E0000000073	0+004333E0000000074	0+004893E0000000075	0+004883E
0000000076	0+004379E0000000077	0+004626E0000000078	0+004976E0000000079	0+005283E
0000000080	0+004740E0000000081	0+005143E0000000082	0+004493E0000000083	0+004911E
0000000084	0+004519E0000000085	0+004661E0000000086	0+004903E0000000087	0+004729E
0000000088	0+004845E0000000089	0+004411E0000000090	0+004EC2E0000000091	0+004833E
0000000092	0+004323E0000000093	0+004313E0000000094	0+004446E0000000095	0+024511E
0000000096	0+004743E0000000097	0+004493E0000000098	0+004724E0000000099	0F0017393
0000000101	0+017049E0000000201	0+016020E0000000301	0-007274E0000000401	0+004765E
0000000103	0+015570E0000000203	0+014496E0000000303	0-007273E0000000403	0+007111E
0000000105	0+017005E0000000205	0+015970E0000000305	0-004283E0000000405	0+004366E
0000000107	0+014683E0000000207	0+013796E0000000307	0-003910E0000000407	0+006552E
0000000109	0+013503E0000000209	0+017775E0000000309	0-003954E0000000409	0+005355E
0000000111	0+013946E0000000211	0+016230E0000000311	0-000002E0000000411	0+004496E
0000000113	0+014376E0000000213	0+013019E0000000313	0-000074E0000000413	0+006817E
0000000115	0+014347E0000000215	0+013032E0000000315	0+000224E0000000415	0+004189E
0000000117	0+017263E0000000217	0+012926E0000000317	0+0002C4E0000000417	0+006175E
0000000119	0+017353E0000000219	0+012936E0000000319	0+000500E0000000419	0+005427E
0000000121	0+019925E0000000221	0+021849E0000000321	0+000373E0000000421	0+004489E
0000000123	0+021151E0000000223	0+020816E0000000323	0+000E95E0000000423	0+006925E
0000000125	0+022597E0000000225	0+025188E0000000325	0+000892E0000000425	0+004391E
0000000127	0+023295E0000000227	0+025011E0000000327	0+000735E0000000427	0+006135E
0000000129	0+022769E0000000229	0+025518E0000000329	0+000822E0000000429	0+005904E
0000000131	0+010354600CC00231	0+025035E0000000331	0-001629E0000000431	0+004699E
0000000133	0+014094E0000000233	0+024086E0000000333	0+000103E0000000433	0+007143E
0000000135	0+017821E0000000235	0+024736E0000000335	0-002529E0000000435	0+004695E
0000000137	0+017985E0000000237	0+025305E0000000337	0-000260E0000000437	0+006098E
0000000139	0+018440E0000000239	0+025291E0000000339	0-001829E0000000439	0+006394E

TEST I... NUMBER 5011151415230

0000000001	1515151234000000000007	C+00103350000000000051	0+C01849EC0CC000059	C+0000011E
0000000063	0+00[illegible]000000001	0+00[illegible]00000000062	0+000004E000000063	0+000063[illegible]
0000000065	[illegible]	C+00533E0000000065	0+00526E00000000067	0+0051[illegible]36
0000000069	0+00[illegible]0000000069	C+0001E0000000079	0+C0494260CC0000071	C+0048[illegible]E
0000000072	0+00[illegible]000000073	C+00[illegible]E0000000074	0+0051[illegible]00000073	0+00[illegible]23E
0000000075	0+00[illegible]0000000077	C+00[illegible]23[illegible]0000000073	0+005626ECC0C000079	0+005800E
0000000080	0+00[illegible]2270036000061	0+0051960000000082	0+00[illegible]021C0C0C000083	0+00[illegible]43E
0000000084	0+00[illegible]0000000085	C+00[illegible]369000000086	0+00526560000000087	0+000001E
0000000089	[illegible]	C+00[illegible]E0000000091	0+0031036CC00000091	0+0052796
0000000092	0+00[illegible]0000000093	C+00[illegible]0000000094	0+00[illegible]49EC0C00000095	0+0265366
0000000096	0+00[illegible]0000000097	C+0049[illegible]E000000C0097	0+005177CC00C000099	0F0013[illegible]3
0000000101	0+0[illegible]0000000201	C+01[illegible]011[illegible]0000000301	0-007275[illegible]CC0C000401	0+004323E
0000000103	0+01[illegible]11[illegible]000000203	C+01+377C000000C0303	0-007275CC0C000403	0+007[illegible]33E
0000000110	[illegible]	C+01[illegible]0000000305	C-00725[illegible]CCCC0000405	C+0033336
0000000107	0+01[illegible]000000207	C+013[illegible]0000000307	0-0039[illegible]2CC0C0000407	0+0076186
0000000109	0+01[illegible]0000000209	C+013+27E000000303	0-0042[illegible]00000409	0+004236
0000000111	0+013[illegible]0000000211	C+013[illegible]C0000000311	0+C011CC[illegible]0000411	C+0040[illegible]6
0000000113	0+01[illegible]000000213	C+0127[illegible]0000000313	0+00[illegible]0000413	0+00[illegible]0E
0000000115	0+[illegible]1-1[illegible]0000000215	C+0127[illegible]0000000315	0+0013[illegible]000415	0+00303[illegible]E
0000000117	0+01[illegible]0000000217	C+012620E000000317	0+CC10326C0C000417	C+0071096
0000000119	0+017323[illegible]0000000219	C+012[illegible]0000000319	0+C01735CCCC00000419	0+0041[illegible]3E
0000000121	0+01[illegible]0000000221	C+022[illegible]28000C000321	0+00117[illegible]00000421	0+00[illegible]513E
0000000123	0+021[illegible]0000000223	C+021[illegible]14C000000323	0+0019C76C0C000423	0+005[illegible]11E
0000000125	0+[illegible]0000000225	C+02214960000000325	C+0017316CC00000425	C+00303[illegible]E
0000000127	0+1237[illegible]0000000227	C+021[illegible]7C000000327	0+002078ECCC0000427	0+0072106
0000000129	0+013-7[illegible]0000000229	C+02[illegible]30E000000329	0+0017[illegible]CCCC000429	0+0042[illegible]0E
0000000131	0+01[illegible]0000000231	C+02222[illegible]0000000331	0-C01[illegible]C0C000431	0+0057[illegible]6
0000000133	0+01[illegible]0000000233	C+02[illegible]14[illegible]000000333	0+C09[illegible]CC00000433	0+007[illegible]8E
0000000135	0+012-12[illegible]000000235	0+021[illegible]1E000000335	0-0030-8C0C0000435	0+0033376
0000000137	0+015+23E00CC000237	C+0227[illegible]CC000000337	0+009874[illegible]0000437	C+007432E
0000000139	0+01[illegible]0000000239	C+022[illegible]2C000000339	0-00319[illegible]0C000439	0+0049[illegible]6
0000000141	0+01[illegible]0000000241	C+01[illegible]011[illegible]0000000341	0-007275[illegible]00000441	0+000035[illegible]
0000000143	0+01[illegible]0000000243	C+01[illegible]0116000000343	0-007276ECCCC000443	0+000035[illegible]
0000000145	0+00572260000000245	C+03[illegible]000000345	0-00C324ECCCC000445	C+0070[illegible]76
0000000147	0+01[illegible]0000000247	C+0[illegible]0000000347	0+0063426C000000447	0+0133156

TEST 1.2. NUMBER 30116151590

0000000301	1A1515290000000000657	C+00:034C000000000053	0+0018356C00000000059	0+000011E
0000000060	3+0000786000000000061	C+00C027C0000000062	0+0006E7E0C000000063	0+000628E
0000000064	0+0057570000000000065	C+00703EC0000000000065	0+0052566C00000000067	0+005173E
0000000068	0+0050043C00000000068	C+0C5018C000000000070	0+0049490C00000000071	0+004875E
0000000072	0+00493C000000000073	C+00451160000000074	0+0051246C10000000075	0+005437E
0000000075	0+0043326000000000077	C+005038C000000000078	0+0055416C00000000079	C+005824E
0000000081	0+0052306000C000081	C+005570E000000000082	0+0045706CC0C0000083	0+005462E
0000000084	0+0048220000000000085	C+00519760000000086	0+0062756C000000087	0+005009E
0000000088	0+0053736000000000089	C+0047-76000000000090	0+0051296C000050091	C+005239E
0000000092	0+0047566000000000093	C+005331C00000000094	0+0048516C00000000095	0+032920E
0000000095	0+0051136000000000097	C+00497060000000000098	0+0052C86C00000000099	0F0018+33
0000000101	0+0170336010000000201	C+003230E000000000301	0-0072766CC0C000401	0+004621E
0000000103	0+0154106000CC00203	C+0143556C0000000303	0-0072756C0C0000403	C+007502E
0000000105	0+0133500000000205	C+013582C00000000305	0-0045426C00000000405	0+004002E
0000000107	0+0140550000000207	C+0133946000000000307	0-0033376000C000407	0+007450E
0000000109	0+0132376000C000209	C+015273C0000000309	C-004035EC00000000409	0+004867E
0000000111	0+0135146000CC00211	C+0157466000000000311	0+001C736C00000000411	0+004435E
0000000113	0+0135276000000213	C+0127426000000000313	0+0004396C00000000413	0+006924E
0000000115	0+0141566000C000215	C+0127456000000000315	0+0012946C00C0000415	C+003704E
0000000117	0+0156346000C000217	C+0120216000000000317	0+001C406CC0C000417	0+007027E
0000000119	0+0173216000000219	C+0120556000000000319	0+0017226000000000419	0+004820E
0000000121	0+0133086000000221	C+0229256000000000321	0+0011206C000000421	0+004715E
0000000123	0+02143C09CC000223	C+0111206000000000323	0+0016356CC0C000423	0+007137E
0000000125	0+0229326000CC00225	C+02394560000000000325	0+0017336000000000425	0+003735E
0000000127	0+0237436000000000227	C+0235356000000000327	0+0020546C00C000427	0+007037E
0000000129	0+0234-1600000000229	C+0245126000000000329	0+0017596CC0000429	0+005285E
0000000131	0+0133306000CC00231	C+0240346000000000331	0-0015516000000000431	0+005537E
0000000133	0+0149356000C000233	C+0224536000000000333	0+0004596C00C000433	0+007924E
0000000135	0+01-7216000CC00235	C+0252466000000000335	0-0025936000000000435	0+004048E
0000000137	0+0153256000CC00237	C+0244316000000000337	0+0008546000C000437	0+007220E
0000000139	0+0149536000000239	C+0243146000000000339	0-0022996C0000000439	0+006035E
0000000141	0+0179346000CC00241	C+0150086000000000341	0-0072766000000000441	0+000037E
0000000143	0+0170346000CC00243	C+0150036000000000343	0-0072776C0C000443	0+000036E
0000000145	0+0357216000C0C10245	0+0350376000000000345	0-0003236C000000445	0+007070E
0000000147	0+0530576000CC00247	C+0533796000000000347	0+0063436000000000447	0+013818E

TEST I.D. NUMBER 301161615790

0000000301	1816157900000000057	0+005096E000000058	0+001849E000000059	0+000010E
0000000060	0+000656E000000061	0+000656E000000062	0+000666E000000063	0+000656E
0000000064	0+005732E000000065	0+005638E000000066	0+005291E000000067	0+005171E
0000000068	0+005040E000000069	0+005021E000000070	0+004945E000000071	0+004870E
0000000072	0+004942E000000073	0+004363E000000074	0+005262E000000075	0+005422E
0000000076	0+004523E000000077	0+005058E000000078	0+005503E000000079	0+005812E
0000000080	0+005251E000000081	0+005581E000000082	0+004953E000000083	0+005447E
0000000084	0+004555E000000085	0+005193E000000086	0+005304E000000087	0+005080E
0000000088	0+005350E000000089	0+004785E000000090	0+005039E000000091	0+005224E
0000000092	0+004757E000000093	0+005314E000000094	0+004880E000000095	0+025309E
0000000096	0+005155E000000097	0+004970E000000098	0+005213E000000099	0F0018433
0000000101	0+017034E000000201	0+015010E000000301	0-007276E000000401	0+005009E
0000000103	0+015426E000000203	0+014377E000000303	0-007276E000000403	0+007600E
0000000105	0+015986E000000205	0+015958E000000305	0-004038E000000405	0+004357E
0000000107	0+014039E000000207	0+013589E000000307	0-003772E000000407	0+007412E
0000000109	0+013259E000000209	0+016219E000000309	0-003859E000000409	0+005283E
0000000111	0+013639E000000211	0+016342E000000311	0+001096E000000411	0+004685E
0000000113	0+013466E000000213	0+006577E000000313	0+000446E000000413	0+007203E
0000000115	0+014220E000000215	0+012757E000000315	0+001312E000000415	0+004037E
0000000117	0+016837E000000217	0+012637E000000317	0+001605E000000417	0+007022E
0000000119	0+017322E000000219	0+012674E000000319	0+001733E000000419	0+005331E
0000000121	0+019955E000000221	0+022806E000000321	0+001178E000000421	0+004825E
0000000123	0+021630E000000223	0+021453E000000323	0+001904E000000423	0+007461E
0000000125	0+023020E000000225	0+024394E000000325	0+001728E000000425	0+004211E
0000000127	0+023739E000000227	0+024630E000000327	0+002063E000000427	0+006945E
0000000129	0+023497E000000229	0+025498E000000329	0+001782E000000429	0+005783E
0000000131	0+010324E000000231	0+025051E000000331	0-001235E000000431	0+005250E
0000000133	0+012703E000000233	0+023316E000000333	0+000707E000000433	0+008133E
0000000135	0+016254E000000235	0+024356E000000335	0-002317E000000435	0+004527E
0000000137	0+015509E000000237	0+025349E000000337	0+000654E000000437	0+006964E
0000000139	0+015950E000000239	0+025373E000000339	0-001798E000000439	0+006550E
0000000141	0+017035E000000241	0+016010E000000341	0-007277E000000441	0+000036E
0000000143	0+017035E000000243	0+016010E000000343	0-007277E000000443	0+000037E
0000000145	0+035722E000000245	0+035096E000000345	0-000324E000000445	0+007071E
0000000147	0+053667E000000247	0+053380E000000347	0+006343E000000447	0+013820E

TEST I.D. NUMBER 00111171?330

0000000301	1+1715?90000000057	0+00303?6000000058	0+001852E000000059	0+000010E
0000000060	0+000??3E000000061	0+0016?6E000000062	0+0006?EE000000063	0+0006?5E
0000000064	0+00?? ?060000000065	0+00?718E000000066	0+00?299E000000067	0+005177E
0000000068	0+00?0?5E000000069	0+00?049E000000070	0+004953E000000071	0+004873E
0000000072	0+00??52E000000073	0+004372E000000074	0+00534EE000000075	0+005402E
0000000076	0+004??6E000000077	0+00?072E000000078	0+00550?F000000079	0+00?813E
0000000080	0+00?2?4E000000081	0+00?c17E000000082	0+004573E000000083	0+00?433E
0000000084	0+00??49E000000085	0+00?135E000000086	0+005341E000000087	0+005169E
0000000088	0+00?3?1E000000089	0+00?34?E000000090	0+005103E000000091	0+00?2?3E
0000000092	0+00?73?E000000093	0+00?323E000000094	0+004890E000000095	0+027230E
0000000096	0+00?193E000000097	0+00?9??E000000098	0+00?220E000000099	CF0018453
0000000101	0+017033E000000201	0+01?003?00000000301	0-007276E000000401	0+005300E
0000000103	0+01???3E000000203	0+014370E000000303	0-007277E000000403	0+007731E
0000000105	0+01?9?7E000000205	0+0159?1E000000305	0-003??6E000000405	0+00?650E
0000000107	0+01??33E000000207	0+013819E000000307	0-003E02E000000407	0+0074?3E
0000000109	0+01325?7000000209	0+0171?9E000000309	0-003E?7E000000409	0+005631E
0000000111	0+015701E000000211	0+01764?E000000311	0+001111E000000411	0+0048E3E
0000000113	0+0133?7E000000213	0+0127?9E000000313	0+000490E000000413	0+00751?E
0000000115	0+014230E000000215	0+00?624E000000315	0+001341E000000415	0+004408E
0000000117	0+01?304E000000217	0+012651E000000317	0+000322E000000417	0+006998E
0000000119	0+017322E000000219	0+0126?9E000000319	0+001773E000000419	0+005655E
0000000121	0+0200?3E000000221	0+0225?7?000000321	0+0011?8E000000421	0+004893E
0000000123	0+0217?6E000000223	0+02144?E000000323	0+001935E000000423	0+0076E3E
0000000125	0+023027E000000225	0+02?7?1E000000325	0+001692E000000425	0+004520E
0000000127	0+023612E000000227	0+025503E000000327	0+002090E000000427	0+006885E
0000000129	0+0235?3E000000229	0+02?219E000000329	0+001842E000000429	0+006113E
0000000131	0+010?31E000000231	0+02?819E000000331	0-00116EE000000431	0+005107E
0000000133	0+01?130E000000233	0+024?31E000000333	0+000933E000000433	0+008091E
0000000135	0+017375E000000235	0+025199E000000335	0-002153E000000435	0+0048?4E
0000000137	0+017?54E000000237	0+020316E000000337	0+000659E000000437	0+006852E
0000000139	0+017879E000000239	0+02?115E000000339	0-001500E000000439	0+006814E
0000000141	0+01703?E000000241	0+018010E000000341	0-007276E000000441	0+000039E
0000000143	0+017033E000000243	0+01?010E000000343	0-007277E000000443	0+00003?E
0000000145	0+03?72?E000000245	0+03?0?0E000000345	0-000323E000000445	0+00707?E
0000000147	0+0536?4E000000247	0+053387E000000347	0+00634?E000000447	0+013824E

TEST [illegible] NUMBER [illegible]12304-1-33

0000000001	23041[illegible]000000057	0+004[illegible]1E000000005[illegible]	0+001381E000000059	0+000013E
0000000061	0+000077E000000061	0+00070E000000062	0+000L70E00000063	0+00007+E
0000000064	0+00[illegible]000066	0+00+24E00000006[illegible]	0+004533E000000067	0+004833E
0000000069	0+00-0[illegible]46E000000069	0+00-713E000000070	0+004562E000000071	0+004513E
0000000072	0+00-[illegible]36E000000073	0+004305E000000074	0+004753E000000075	0+005103E
0000000076	0+00+[illegible]2E000000077	0+00-[illegible]E000000078	0+00[illegible]3+3E000000079	0+0054[illegible]
0000000080	0+00+333E000000081	0+00[illegible]1[illegible]4E000000082	0+004711E000000083	0+005237E
0000000084	0+00[illegible]E000000085	0+004[illegible]+7E000000086	0+004534E000000087	0+004632E
0000000088	0+00-19[illegible]E000000089	0+00-31[illegible]E000000090	0+00+757E000000091	0+0043[illegible]0E
0000000092	0+00--206E000000093	0+00 003E000000094	0+004[illegible]0E000000095	0+019013E
0000000096	0+00+[illegible]E000000097	0+00-[illegible]-0E000000098	0+004805E000000099	0F0018[illegible]03
0000000101	0+01733[illegible]E000000201	0+012272E000000301	0+000333E000000401	0+0331[illegible]0E
0000000103	0+01[illegible] 00E000000203	0+01-4[illegible]7E000000303	0+000333E000000403	0+0370[illegible]2E
0000000105	0+01[illegible]-20E000000205	0+01[illegible]23+6E000000305	0+000E05E000000405	0+032217E
0000000107	0+014[illegible]76E000000207	0+0136[illegible]06E000000307	0+00+310E000000407	0+03723[illegible]E
0000000109	0+[illegible]135[illegible]E000000209	0+01[illegible]12[illegible]E000000309	0+003[illegible]7E000000409	0+033073E
0000000111	0+01.[illegible]05E000000211	0+01369[illegible]E000000311	0+010E6E000000411	0+032873E
0000000113	0+01[illegible]0-1E000000213	0+01277+E000000313	0+00[illegible]2[illegible]E000000413	0+036327E
0000000115	0+01-[illegible]3[illegible]E000000215	0+0123[illegible]4E000000315	0+010[illegible]30E000000415	0+0318[illegible]0E
0000000117	0+01.022E000000217	0+012[illegible]39E000000317	0+00[illegible]10E000000417	0+036614E
0000000119	0+01[illegible]15E000000219	0+012[illegible]7E000000319	0+011372E000000419	0+033036E
0000000121	0+0212-[illegible]E000000221	0+02-23[illegible]E000000321	0+00[illegible]28E000000421	0+03332[illegible]E
0000000123	0+022[illegible]-2[illegible]E000000223	0+022+33E000000323	0+011171E000000423	0+03[illegible]22E
0000000125	0+0235+5[illegible]E000000225	0+02351[illegible]E00000032[illegible]	0+010E7E000000425	0+031818E
0000000127	0+02+022E000000227	0+02[illegible]00E000000327	0+011.3+E000000427	0+033[illegible]3E
0000000129	0+02 1 [illegible]E000000229	0+02+1[illegible]7E000000329	0+0107[illegible]E000000429	0+0331[illegible]1E
0000000131	0+01[illegible]+72E000000231	0+023[illegible]23E000000331	0+00E10E000000431	0+0345[illegible]7E
0000000133	0+00[illegible] 03E000000233	0+021+73E000000333	0+00[illegible]27[illegible]E000000433	0+0371[illegible]0E
0000000135	0+013+3[illegible]E000000235	0+02272[illegible]E000000335	0+00[illegible]412E000000435	0+0320+4E
0000000137	0+01[illegible]E000000237	0+02+207E000000337	0+00[illegible]30E000000437	0+03[illegible]5+7E
0000000139	0+01.[illegible]23E000000239	0+02-0[illegible]E000000339	0+00[illegible]3E000000439	0+0340[illegible]3E
0000000141	0+00[illegible]2[illegible]E000000241	0+00.27+E000000341	0-003[illegible]-9E000000441	0+02+3+3E
0000000143	0+01.+13[illegible]E000000243	0+017310E000000343	0+00072[illegible]E000000443	0+02[illegible]E
0000000145	0+03.029E000000245	0+03.232E000000345	0+0072+8[illegible]E000000445	0+03[illegible]3E
0000000147	0+05[illegible]E000000247	0+053+32E000000347	0+01+4[illegible]1E000000447	0+0+2[illegible]E

TEST I.D. NUMBER 301230.1.693

0000000301	23051959 0000000047	0+0047336000000000058	0+0012746000000000059	0+0000126
0000000060	0+0000500000000000061	0+000073600000000062	0+000072600000000063	0+0000706
0000000064	0+0005416000000000065	0+00[illegible]00000000066	0+000012600000000057	0+0048856
0000000068	0+0047196000000000069	0+004795600000000070	0+0045856000000000071	0+0045416
0000000072	0+004[illegible]000000000073	0+004533[illegible]00000000074	0+0045586000000000075	0+0051506
0000000076	0+0045526000000000077	0+004735600000000078	0+0052516000000000079	0+0052216
0000000080	0+0049336000000000081	0+00522460000000000082	0+0046306000000000083	0+0051956
0000000084	0+0045[illegible]6000000000085	0+00465360000000000086	0+0045976000000000087	0+0046636
0000000088	0+005[illegible]76000000000089	0+0054[illegible]60000000000090	0+0046106000000000091	0+0048126
0000000092	0+0045596000000000093	0+00[illegible]01760000000000094	0+0045476000000000095	0+0221246
0000000096	0+0047316000000000097	0+004[illegible]960000000000098	0+0045906000000000099	0F0016933
0000000101	0+0173[illegible]0000000000201	0+0162700000000000301	0+003336000000000401	0+0339736
0000000103	0+015[illegible]60000000000203	0+0145276000000000303	0+0003336000000000403	0+0370026
0000000105	0+017[illegible]6000000000205	0+015227[illegible]000000000305	0+0037136000000000405	0+0329636
0000000107	0+014[illegible]36000000000207	0+013[illegible]46000000000307	0+0043456000000000407	0+0371036
0000000109	0+0135[illegible]60000000000209	0+012[illegible]160000000000309	0+0041116000000000409	0+0338016
0000000111	0+0138346000000000211	0+015[illegible]20600000000000311	0+0105736000000000411	0+0335736
0000000113	0+0149416000000000213	0+01277[illegible]0000000000313	0+003[illegible]36000000000413	0+0355056
0000000115	0+0145516000000000215	0+0123[illegible]000000000315	0+0105436000000000415	0+0325496
0000000117	0+017[illegible]96000000000217	0+0123380000000000317	0+0035496000000000417	0+0367236
0000000119	0+0177136000000000219	0+012[illegible]36000000000319	0+0113676000000000419	0+0332506
0000000121	0+0203136000000000221	0+0124231[illegible]000000000321	0+0099976000000000421	0+0336576
0000000123	0+0227256000000000223	0+022431[illegible]000000000323	0+0111916000000000423	0+0365646
0000000125	0+0234736000000000225	0+02[illegible]435[illegible]000000000325	0+0106776000000000425	0+0325236
0000000127	0+0241346000000000227	0+0243[illegible]000000000327	0+0116306000000000427	0+0367346
0000000129	0+025173600000000229	0+022[illegible]936000000000329	0+0105406000000000429	0+0342316
0000000131	0+0199150000000000231	0+02[illegible]4[illegible]5000000000331	0+0072176000000000431	0+0341116
0000000133	0+0113756000000000233	0+0235[illegible]960000000000333	0+0093746000000000433	0+0376120
0000000135	0+015[illegible]7450000000000235	0+024[illegible]30[illegible]000000000335	0+0059236000000000435	0+0327596
0000000137	0+015[illegible]5600000000000237	0+02[illegible]3416000000000337	0+0097156000000000437	0+0357836
0000000139	0+015[illegible]1[illegible]6000000000239	0+0260356000000000339	0+0003336000000000439	0+0351336
0000000141	0+0060529600000000241	0+00[illegible]271[illegible]000000000341	0-0038306000000000441	0+0243456
0000000143	0+015[illegible]146000000000243	0+0173376000000000343	0+0007256000000000443	0+0228506
0000000145	0+0350326000000000245	0+035272600000000345	0+0075466000000000445	0+0356476
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TEST I... NUMBER 2(1230(1509)

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0C00000064	0+00[illegible]470030CCC00065	C+C0[illegible]4396C00000006[illegible]	0+00[illegible]CC6EEC0C00067	0+004879E
0C00000065	0+00[illegible]1250JCCC00[illegible]	C+C04733C00000CC070	0+004577EEC0C000071	0+004527E
0C00000072	0+00[illegible]0400000C00073	C+0045196000000007[illegible]	0+004EC9EECC0000075	0+0050[illegible]2E
0C00000075	0+00[illegible]5136000CC00077	C+000013E000000078	0+005422EC000000079	0+005523E
0C00000080	0+004323E00CCC00081	C+C0[illegible]231EC0000CC082	0+0047[illegible]1[illegible]CC0C000083	0+005295E
0C00000084	0+004513C000C00085	C+C0[illegible]831E00000CC085	C+00[illegible]C746ECC0C000087	0+004647E
0C00000088	0+00[illegible]15[illegible]30JCCC00C89	C+C04291E000000009[illegible]	0+0047-0ECCC0C000091	0+005031E
0C00000092	0+0C[illegible]42E30CCC00C93	C+C0[illegible]022E000000C09[illegible]	C+00441[illegible]C30C00009[illegible]	0+027389E
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00000C0101	0+017390E000CC00201	C+C1[illegible]2[illegible]9C0000000301	0+000332EC0CC000401	0+032891E
00000C0103	0+01[illegible]577E00CCC00203	C+C14437[illegible]C00000000303	0+00C332E000C000403	0+037183E
0C00000105	0+0173[illegible]4C00CCC00205	C+C1[illegible]227[illegible]000000C0305	0+00C[illegible]C2EEC0C000405	C+031631E
0C00000107	0+01[illegible]527[illegible]030CC00207	C+013C72E0000000307	0+001[illegible][illegible]9EC000000407	0+0374[illegible]3E
0C00000109	0+013[illegible]17E00CC0C00209	C+011[illegible]30E000000000309	C+E04335EC0C000409	0+032412E
0C00000111	0+0137[illegible]2C0J0CC00211	C+C11[illegible][illegible]96000000C0311	0+01C646EEC0C000411	0+032551E
0C00000113	0+01-003C03CCC00213	C+C12723[illegible]00000C0313	0+008941EC0C000413	0+036432E
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0C00000117	0+01[illegible]9[illegible]3E00CC00217	C+01233[illegible]E00000C0317	0+009558EC000000417	C+03670[illegible]E
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0C00000121	0+0262[illegible]7E0000C00221	C+02+310E000000321	0+009953EC00C000421	0+033024E
0C00000123	0+0227[illegible]2E0JCCC00223	C+02244J[illegible]000000323	0+011219EC0C000423	0+0364C1E
0C00000125	0+023[illegible]23C03CCC00225	C+0213[illegible][illegible]6000000C0325	0+010EECEC00000425	0+031353E
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0C00000129	0+02[illegible]234E000C0C00229	C+0227[illegible]J[illegible]0000000329	0+010797E0C0C000429	0+032448E
0C00000131	0+016[illegible]99[illegible]J0CCC00231	C+C21977E0000000331	0+006496EECCC000431	C+034876E
0C00000133	0+00[illegible][illegible]1[illegible]E00CCC00233	C+02022[illegible]C000000333	0+009188EC0CC00433	0+036891E
0C00000135	0+010[illegible]91E000C0C00235	C+C2130[illegible]C000000335	0+004876EC00000435	0+031571E
0C00000137	0+011637E000CC00237	C+02277[illegible]EC0000CC337	0+0C988EECC000437	C+036526E
0C00000139	0+012765E0000C00239	C+022434E000000339	0+004185EECCC000439	0+033028E
0C00000141	0+00[illegible][illegible]27E0JCCC00241	C+005272E0000000034[illegible]	0-003851EC00000441	0+024346E
0C00000143	0+013411E000C0C00243	C+C1730[illegible]E00000C0[illegible]	0+0C072EECCC000443	0+028847E
0C00000145	0+036027E00CCC00245	C+035220E0000000345	0+0C7547ECC0C0004+5	0+035695E
0C00000147	0+0[illegible]3981E000C0C00247	C+05349-EC00000347	0+01446EE00C0C00447	0+042673E

TEST I.D. NUMBER 3C1231319200

0000000301	2313152000000000057	0+005155E0000000058	0+001389E0000000059	0+000012E
0000000060	0+000072E0000000061	0+000046E0000000062	0+000855E0000000063	0+000039E
0000000064	0+005199E0000000065	0+006056E0000000066	0+005570E0000000067	0+005497E
0000000068	0+005230E0000000069	0+005356E0000000070	0+005120E0000000071	0+005093E
0000000072	0+005114E0000000073	0+005034E0000000074	0+005330E0000000075	0+005675E
0000000076	0+005115E0000000077	0+005539E0000000078	0+006117E0000000079	0+006116E
0000000080	0+005510E0000000081	0+005550E0000000082	0+005340E0000000083	0+005937E
0000000084	0+004959E0000000085	0+005419E0000000086	0+005477E0000000087	0+005159E
0000000088	0+005735E0000000089	0+004750E0000000090	0+005298E0000000091	0+005238E
0000000092	0+004993E0000000093	0+005302E0000000094	0+004925E0000000095	0+022815E
0000000096	0+005010E0000000097	0+005223E0000000098	0+005332E0000000099	0F0019943
0000000101	0+017396E0000000201	0+016279E0000000301	0+000329E0000000401	0+034273E
0000000103	0+015405E0000000203	0+014235E0000000303	0+000329E0000000403	0+038343E
0000000105	0+017357E0000000205	0+016236E0000000305	0+001153E0000000405	0+032391E
0000000107	0+014574E0000000207	0+013395E0000000307	0+002374E0000000407	0+038792E
0000000109	0+0129[illegible]7E0000000[illegible]	0+012153E0000000309	0+005210E0000000409	0+032793E
0000000111	0+0133[illegible]9E0000000211	0+012251E0000000311	0+012223E0000000411	0+033445E
0000000113	0+013574E0000000213	0+012334E0000000313	0+010205E0000000413	0+037457E
0000000115	0+014302E0000000215	0+012401E0000000315	0+012057E0000000415	0+031944E
0000000117	0+01[illegible]532E0000000217	0+012131E0000000317	0+011133E0000000417	0+037970E
0000000119	0+0177[illegible]3E0000000219	0+012256E0000000319	0+012941E0000000419	0+032933E
0000000121	0+020453E0000000221	0+025156E0000000321	0+011338E0000000421	0+033617E
0000000123	0+023529E0000000223	0+023090E0000000323	0+013022E0000000423	0+036954E
0000000125	0+024169E0000000225	0+023445E0000000325	0+012370E0000000425	0+031824E
0000000127	0+024892E0000000227	0+022778E0000000327	0+013507E0000000427	0+037770E
0000000129	0+025324E0000000229	0+024143E0000000329	0+012288E0000000429	0+032883E
0000000131	0+0102[illegible]1E0000000231	0+012107E0000000331	0+008093E0000000431	0+034832E
0000000133	0+003600E0000000233	0+021610E0000000333	0+010645E0000000433	0+037916E
0000000135	0+011325E0000000235	0+022537E0000000335	0+005841E0000000435	0+031998E
0000000137	0+012231E0000000237	0+024227E0000000337	0+011361E0000000437	0+037699E
0000000139	0+013111E0000000239	0+023729E0000000339	0+004775E0000000439	0+033530E
0000000141	0+005522E0000000241	0+005272E0000000341	0-003857E0000000441	0+024359E
0000000143	0+01[illegible]413E0000000243	0+017312E0000000343	0+000720E0000000443	0+028803E
0000000145	0+030038E0000000245	0+035297E0000000345	0+007546E0000000445	0+035714E
0000000147	0+053426E0000000247	0+053526E0000000347	0+014469E0000000447	0+042706E

T... .... NUMBER 301231-19430

0000000001	231-1...0000000000	C+0042126000000000059	0+00135160000000059	0+0000136E
0000000003	0+.000...00000000001	C+0000.2600000000062	0+0000026000000000063	C+0000055E
0000000004	0+00.1 000000000..	C+000..4600000000065	C+005..7.0000000067	0+005492E
000000000..	0+00...0000000000..	C+0033..0000000000070	0+00511E0000000071	0+005093E
0000000072	0+00.1..0000000073	C+000.1600000000074	0+005297E0000000075	C+005733E
000000000..	0+00.1...0000000..	C+00 ..1000000000079	0+0060...0000000079	0+006075E
00000000..	0+00..72.0000000 1	C+00.77..000000000082	0+005317E0000000083	0+005912E
0000000000..	0+00..1200000000..	C+00..716000000000..	0+0053.9.0000000087	C+005124E
000000000..	0+00.7..0000000..	C+004516.00000000090	0+005339.0000000091	0+005136E
0000000092	0+00..0000000000..	C+00.6150000000009.	0+005000E0000000095	0+024956E
000000009..	0-00.0 ..0000000..	C+00.1926000000000093	0+00339.00000000099	0F0039343
0000000101	0+017..7.0000000201	C+012.2.2.0000000301	0+00325.00000000401	0+034679E
0000000103	0+01 .....0000.0203	C+01.2..600000000303	0+00322..0000000403	0+037737E
0000000105	0+01...0.0000000206	C+01.2316000000000305	0+00116.0000000405	0+032551E
0000000107	0+01..........0207	C+0133..E000000000307	0+0052216000000407	C+035716E
0000000109	0+012..2.00000000209	C+0134..0000000000309	0+0043.3..00000409	0+033322E
0000000111	0+0133..0900000211	C+0137116000000000311	0+0122166000000411	0+034106E
0000000113	0+013..2 213	C+01234.000000000313	0+0121900000000413	C+037238E
0000000115	0+01.231.0000000..	C+0124.1..0000000031.	0+0120...00000000415	C+032416E
000000011.	0+01 ..2..0000000217	C+0121...000000000317	0+0111.0600000000417	0+036005E
000000011.	0+0177.2.0.0000.0021	C+0122. ..00000.031.	0+0129256000000419	C+033427E
0000000121	0+020..3.0000000221	C+02..7.5.0000000321	0+011333.00000000421	0+034216E
0000000123	0+023...3.000000223	C+.233..E000000000323	0+013019.0000000423	0+037153E
000000012.	0+02.1.2.00000000225	C+025..9.0000000032.	0+0123..1.0000000425	C+032384E
0000000127	0+02..22.00000000227	C+0243..6000000000327	0+013495E0000000427	C+035013E
000000012.	0+02..2..00000..22.	C+02 ..32.0000000032.	0+0122796000000429	0+033715E
0000000131	0+0102.3-0000000231	C+02..22.0000000331	0+00329..00000000431	C+034880E
0000000133	0+00....3.000000233	C+0231..E000000000333	0+003978E00000000433	C+035164E
000000013.	0+01.....00000000235	C+02.03...000000033.	0+00.2326000000043.	C+032556E
0000000137	0+0137.3.000000237	C+02...9.000000000337	0+0113976000000437	C+036033E
0000000139	0+01..+20.0000000239	C+02..3396000000000339	0+003618.00000000439	C+034560E
0000000141	0+00..22.00000000241	C+00.2736000000000341	0-003287E00000000441	C+024360E
0000000143	0+01...1..0000000243	C+017310.000000000343	0+0007226000000443	0+0286..E
000000014.	0+03.0...0000000245	C+036296.000000000345	0+0075.7.0000000445	C+035717E
0000000147	0+053.2..00000000247	C+0535276000000000347	0+0144E8E00000000447	0+042703E

TEST I.D. NUMBER 3C1231F15E00

0C00000301	2315152000000C00057	C+0052416000000C0055	0+00135EE(C0C000059	C+000013E
0C0000006C0	0+0000074E00CCC00061	C+0000356000000u0062	0+00006E6ECC0C000063	0+000033E
0000000064	0+0001450300C00C65	C+00E072E000000000065	0+005577EC00000067	0+005497E
0C00000063	0+00 231E0000C00069	C+0053494E000000CC70	0+005118EECUC000071	C+005059E
0000000072	0+00.111E00CCC00073	C+0050346000000007	0+005304EC00000075	0+005748E
0C00000075	0+0001436000C00077	C+00339550000000075	0+006029EC00000079	0+006027E
0000000080	0+005577E00CCC00081	C+005732E000000C0082	0+005294EC0C000083	C+005897E
0C00000084	0+004923E00CCC00085	C+0054436000000C008C	0+005347ECC0C000087	0+005122E
0C00000088	0+0057246000C00C89	C+0048576000000C0090	0+00537EECC0C000091	0+005194E
0C00000092	0+005094E000CCC0093	C+005018E000000000094	0+CC5C45ECC00009095	0+020941E
0C00000096	0+0051536000CC0C097	C+00517E000000009E	0+005452E000000099	0F0015543
0000000101	0+017335C0000C00201	C+01E230E0000000301	C+C0C329EC0000000401	0+034752E
0C00000103	0+0154586000CC00203	C+01433216000000u0303	0+000328ECC0C000403	0+037963E
0000000105	0+0173 74 00CCC00205	C+01E225E000000C0305	0+001440EC00G000405	0+033284E
0C00000107	0+014933E000C00207	C+013417E000000000307	0+005281ECC0C000407	0+038503E
0C00000109	0+0123536000C00209	C+014331C000000000309	0+004226ECC0C000409	0+033850E
0C00000111	0+013347E000CCC00211	C+014525E000000C0311	0+012215EC00C000411	0+034279E
0000000113	0+0135E0070CCC00213	C+012378E000000000313	0+C10204ECC0C000413	C+037344E
0000000115	0+014514E000C0C00215	C+00E647C0000000315	0+012053E000C000415	0+032774E
0C00000117	0+016549600CCC00217	C+012130E0000000C317	0+011126ECCCC000417	C+037982E
0C00000119	0+017777E000CC0C0219	C+006959E000000319	0+012935ECC0C000419	C+033805E
0000000121	0+02045700CCC00221	C+025928E0000000321	0+011340EC0000000421	0+034356E
0C00000123	0+023553E0000C00223	C+02305060000000323	0+013617ECCCC000423	C+037500E
0C00000125	0+021916E00CCC00225	C+0284360000000325	0+012363ECC00000425	0+032703E
0000000127	0+02433900CCC00227	C+023338E0000000327	0+013490ECCCC000427	0+038035E
0C00000129	0+0203859000CCC00229	C+02C458E000000329	0+012281ECCCC000429	0+034178E
0000000131	0+010255E00CCC00231	C+025922E000000C0331	0+00826EECC0000431	0+034851E
0C00000133	0+011475E000CC00233	C+02400360000000333	0+010178ECCCC000433	0+038523E
0000000135	0+014704600CCCC00235	C+024754600000000335	0+006437ECC0C000435	0+032909E
0000000137	0+01473600CCCC00237	C+028501E000000C0337	0+011233ECC0C000437	0+038094E
0C00000139	0+015230C000CC00239	C+028332E000000000339	0+00E0E6EECC00000439	0+035027E
0C00000141	0+006621E000CCC00241	C+002736000000000341	0-003857ECC0C000441	0+024355E
0C00000143	0+015414500CCC00243	C+017315E000000C0343	0+000721E000C000443	0+028865E
CC00000145	0+036036E0000CC00245	C+035235E00000000345	0+007545ECC0000445	C+035717E
0000000147	0+0533236000CC00247	C+053527600000000347	0+014438ECC0000447	0+042703E

TEST I.D. NUMBER 301231615700

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0000000060 0+0000726E0000000061 0+0000646E0000000062 0+0000656E0000000063 0+000067E
0000000064 0+0006173E0000000065 0+0006073E0000000066 0+0005554E0000000067 0+005485E
0000000068 0+0052246E0000000069 0+0053636E0000000070 0+0051056E0000000071 0+005099E
0000000072 0+0050396E0000000073 0+0050576E0000000074 0+0053327E0000000075 0+005732E
0000000076 0+0051156E0000000077 0+0053386E0000000078 0+0059936E0000000079 0+006033E
0000000080 0+0055746E0000000081 0+0057246E0000000082 0+0052526E0000000083 0+005854E
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0000000088 0+0056336E0000000089 0+0049016E0000000090 0+0053686E0000000091 0+005245E
0000000092 0+0050006E0000000093 0+0056086E0000000094 0+0050376E0000000095 0+021030E
0000000096 0+0052376E0000000097 0+0051866E0000000098 0+0054556E0000000099 0F0019933
0000000101 0+0173966E0000000201 0+0162796E0000000301 0+0003266E0000000401 0+034863E
0000000103 0+0154546E0000000203 0+0142966E0000000303 0+0003276E0000000403 0+037917E
0000000105 0+0173306E0000000205 0+0162316E0000000305 0+0041256E0000000405 0+033581E
0000000107 0+0146236E0000000207 0+0134436E0000000307 0+0049246E0000000407 0+038438E
0000000109 0+0130296E0000000209 0+0154466E0000000309 0+0046726E0000000409 0+034277E
0000000111 0+0134526E0000000211 0+0156326E0000000311 0+0121816E0000000411 0+034481E
0000000113 0+0137406E0000000213 0+0124156E0000000313 0+0102026E0000000413 0+037420E
0000000115 0+0143896E0000000215 0+0124756E0000000315 0+0120936E0000000415 0+033129E
0000000117 0+0166096E0000000217 0+0122026E0000000317 0+0116136E0000000417 0+037982E
0000000119 0+0177636E0000000219 0+0123346E0000000319 0+0129406E0000000419 0+034238E
0000000121 0+0205796E0000000221 0+0255646E0000000321 0+0113316E0000000421 0+034524E
0000000123 0+0235196E0000000223 0+0230256E0000000323 0+0129786E0000000423 0+037703E
0000000125 0+0242476E0000000225 0+0266356E0000000325 0+0123246E0000000425 0+033086E
0000000127 0+0249306E0000000227 0+0259196E0000000327 0+0134506E0000000427 0+038058E
0000000129 0+0261126E0000000229 0+0273036E0000000329 0+0122966E0000000429 0+034658E
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0000000137 0+0159326E0000000237 0+0272856E0000000337 0+0110216E0000000437 0+038029E
0000000139 0+0163736E0000000239 0+0273176E0000000339 0+0055206E0000000439 0+035535E
0000000141 0+0066196E0000000241 0+0052706E0000000341 0-0038596E0000000441 0+024360E
0000000143 0+0184116E0000000243 0+0173116E0000000343 0+0007196E0000000443 0+028804E
0000000145 0+0360376E0000000245 0+0352926E0000000345 0+0075446E0000000445 0+035715E
0000000147 0+0539266E0000000247 0+0535266E0000000347 0+0144676E0000000447 0+042710E
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TEST I.D. NUMBER 301240815302

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0000000060	0+000087E000000061	0+000079E000000062	0+000081E000000063	0+000083E
0000000064	0+006426E000000065	0+006297E000000066	0+005824E000000067	0+005724E
0000000068	0+005460E000000069	0+005538E000000070	0+005370E000000071	0+005308E
0000000072	0+005316E000000073	0+005271E000000074	0+005510E000000075	0+005930E
0000000076	0+005379E000000077	0+005697E000000078	0+006328E000000079	0+006356E
0000000080	0+005754E000000081	0+006077E000000082	0+005559E000000083	0+006171E
0000000084	0+005117E000000085	0+005633E000000086	0+005825E000000087	0+005348E
0000000088	0+005996E000000089	0+004960E000000090	0+005530E000000091	0+005345E
0000000092	0+005253E000000093	0+005824E000000094	0+005170E000000095	0+017700E
0000000096	0+005206E000000097	0+005428E000000098	0+005801E000000099	0F002020E
0000000101	0+017502E000000201	0+016407E000000301	0+000333E000000401	0+034709E
0000000103	0+015451E000000203	0+014322E000000303	0+000333E000000403	0+038531E
0000000105	0+017451E000000205	0+016361E000000305	0+001274E000000405	0+032698E
0000000107	0+014566E000000207	0+013417E000000307	0+004817E000000407	0+039040E
0000000109	0+012917E000000209	0+012763E000000309	0+005113E000000409	0+033169E
0000000111	0+013294E000000211	0+012979E000000311	0+012602E000000411	0+033958E
0000000113	0+013622E000000213	0+012361E000000313	0+010715E000000413	0+037695E
0000000115	0+014309E000000215	0+012394E000000315	0+012528E000000415	0+032239E
0000000117	0+016537E000000217	0+012106E000000317	0+011860E000000417	0+038208E
0000000119	0+017924E000000219	0+012239E000000319	0+013618E000000419	0+033118E
0000000121	0+020614E000000221	0+025892E000000321	0+011966E000000421	0+034003E
0000000123	0+023661E000000223	0+023474E000000323	0+013545E000000423	0+037221E
0000000125	0+024632E000000225	0+024740E000000325	0+013075E000000425	0+032169E
0000000127	0+025426E000000227	0+023883E000000327	0+014218E000000427	0+038140E
0000000129	0+026054E000000229	0+025379E000000329	0+012980E000000429	0+033248E
0000000131	0+009962E000000231	0+024485E000000331	0+008823E000000431	0+035084E
0000000133	0+008983E000000233	0+022814E000000333	0+010880E000000433	0+038232E
0000000135	0+013073E000000235	0+023590E000000335	0+006252E000000435	0+032363E
0000000137	0+012961E000000237	0+025447E000000337	0+011823E000000437	0+038121E
0000000139	0+013652E000000239	0+024844E000000339	0+005347E000000439	0+034018E
0000000141	0+006574E000000241	0+005243E000000341	0-003911E000000441	0+024193E
0000000143	0+018398E000000243	0+017318E000000343	0+000879E000000443	0+028703E
0000000145	0+036153E000000245	0+035435E000000345	0+007554E000000445	0+035680E
0000000147	0+054040E000000247	0+053661E000000347	0+014475E000000447	0+042588E

TEST 1.0. NUMBER 3012409150 02

0000000301	2409153023000000057	0+005452600000000 58	0+00113F000000000059	0+000014E
0000000060	0+30000730000000061	0+000070600000000062	0+000074E000000063	0+000073E
0000000064	0+300+14600000000065	0+003237600000000066	0+005823E000000067	0+005727E
0000000068	0+00546000000069	0+003604600000000070	0+005359E000000071	0+005311E
0000000072	0+003106000000073	0+002756000000000074	0+005597E000000075	0+003983E
0000000076	0+305336E9000000077	0+005373600000000078	0+006217E000000079	0+006223E
0000000080	0+005040000000081	0+005914E0000000082	0+005488E000000083	0+006109E
0000000084	0+001176300000085	0+003696E0000000086	0+005555E000000087	0+005313E
0000000088	0+005329E000000089	0+005096E0000000090	0+005584E000000091	0+004606E
0000000092	0+005293E900000093	0+005939E0000000094	0+005236E000000095	0+010356E
0000000096	0+305447E000000097	0+007+10E0000000098	0+005658E000000099	0F0020303
0000000101	0+017301E000000201	0+016+04E0000000301	0+000331E000000401	0+035002E
0000000103	0+015440E000000203	0+014316E0000000303	0+000331E000000403	0+035132E
0000000105	0+017438E000000205	0+016365E0000000305	0+003141E000000405	0+033533E
0000000107	0+014614E000000207	0+013445E0000000307	0+003374E000000407	0+036707E
0000000109	0+012353E000000209	0+015034E0000000309	0+004547E000000409	0+034144E
0000000111	0+013354E00000000	0+015275E0000000311	0+012719E000000411	0+034675E
0000000113	0+013559E000000213	0+012351E0000000313	0+010722E000000413	0+037637E
0000000115	0+014360E000000215	0+012431E0000000315	0+012667E000000415	0+033080E
0000000117	0+016476E000000217	0+012153E0000000317	0+011703E000000417	0+038213E
0000000119	0+017833E000000219	0+012232E0000000319	0+013732E000000419	0+034043E
0000000121	0+020730E000000221	0+029356E0000000321	0+011970E000000421	0+034765E
0000000123	0+023631E000000223	0+023446E0000000323	0+013604E000000423	0+037659E
0000000125	0+024559E000000225	0+025356E0000000325	0+013039E000000425	0+033071E
0000000127	0+025337E000000227	0+026155E0000000327	0+014247E000000427	0+038241E
0000000129	0+021536E000000229	0+027532E0000000329	0+012954E000000429	0+034465E
0000000131	0+010037E000000231	0+027030E0000000331	0+008649E000000431	0+035081E
0000000133	0+013514E000000233	0+025059E0000000333	0+010827E000000433	0+036821E
0000000135	0+015438E000000235	0+025813E0000000335	0+006792E000000435	0+033215E
0000000137	0+015439E000000237	0+027568E0000000337	0+011607E000000437	0+038222E
0000000139	0+010053E000000239	0+027557E0000000339	0+006554E000000439	0+035358E
0000000141	0+006573E000000241	0+005241E0000000341	0-003913E000000441	0+024182E
0000000143	0+013386E000000243	0+017317E0000000343	0+000678E000000443	0+026631E
0000000145	0+030143E000000245	0+035428E0000000345	0+007552E000000445	0+035583E
0000000147	0+054035E000000247	0+053657E0000000347	0+014474E000000447	0+042571E

REFERENCES

1. Wennerstrom, A. J. and Hearsey, R. M., "The Design of an Axial Compressor Stage for a Total Pressure Ratio of 3 to 1." Aerospace Research Laboratories, Wright-Patterson AFB, Ohio, ARL TR 71-0061, AD 727001, March 1971.

2. Wennerstrom, A. J. and Frost, G. R., "Design of a Rotor Incorporating Splitter Vanes for a High Pressure Ratio Supersonic Axial Compressor Stage." Aerospace Research Laboratories, Wright-Patterson AFB, Ohio, ARL TR 74-0110, AD 786025, August 1974.

3. Wennerstrom, A. J., Frost, G. R. and DeRose, R. D., "Test of an Axial Compressor Stage Designed for a Total Pressure of Three to One." Aerospace Research Laboratory, Wright-Patterson AFB, Ohio, ARL TR 74-0001, AD 778844, January 1974.

4. Haugen, R. L., Moore, D. G., and Wennerstrom, A. J., "Velocity Profile Measurements in a Model Settling Chamber." Internal ARL Paper (Available upon request), April 1969.

5. Stickney, T. M., "Recovery and Time Response Characteristics of Six Thermocouple Probes in Subsonic and Supersonic Flow." NACA TN 3455, 1955.

6. Frost, G. R., "Phase I Data Reduction for a Single Stage Research Compressor." Aerospace Research Laboratories, Wright-Patterson AFB, Ohio, ARL TR 71-0253, AD 738658, November 1971.

7. Hearsey, R. M., "Modifications to Compressor Test Data Analysis Program UD0200." Aerospace Research Laboratories Wright-Patterson AFB, Ohio, ARL TR 74-0131, November 19[illegible].

8. Holtman, R. L., McClure, R. B., and Sinnet, G. T., "Test of a Supersonic Compressor Cascade with Splitter Vanes." Aerospace Research Laboratories, Wright-Patterson AFB, Ohio, ARL TR 73-0142, AD 774549, December 1973.

9. Johnson, I. A., Bullock, R. O., et al, "Aerodynamic Design of Axial Flow Compresors." National Aeronautics and Space Administration, NASA SP-36, 1965.

*U.S. Government Printing Office: 1975 — 657-023/711